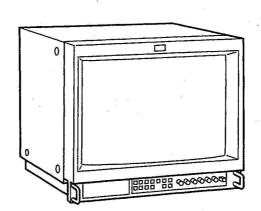
# **SERVICE MANUAL**

DEST.	CHASSIS NO.	MODEL	DEST.	CHASSIS NO.
US Canadian	SCC-N59B-A	PVM-20M2MDU	US Canadian	SCC-N59A-A
AEP	SCC-N33F-A	PVM-20M2MDE	AEP	SCC-N33E-A
Australian	SCC-N17E-A	PVM-20M2MDA	Australian	SCC-N17D-A
	US Canadian AEP	US Canadian SCC-N59B-A AEP SCC-N33F-A	US Canadian SCC-N59B-A PVM-20M2MDU AEP SCC-N33F-A PVM-20M2MDE	US Canadian SCC-N59B-A PVM-20M2MDU US Canadian AEP SCC-N33F-A PVM-20M2MDE AEP



TRINITRON® COLOR VIDEO MONITOR SONY.

# **SPECIFICATIONS**

# Video signal

For PVM-14M2MDU/14M2MDE/14M2MDA/ 20M2MDU/20M2MDE/20M2MDA:

Color system

NTSC, PAL

Resolution

600 TV lines

Aperture correction 0 dB to +6 dB

Frequency response

LINE

10 MHz ± 3 dB (Y signal)

**RGB** 

 $10 \text{ MHz} \pm 3 \text{ dB}$ 

Synchronization

AFC time constant 1.0 msec.

# Picture performance

For PVM-14M2MDU/14M2MDE/14M2MDA:

Normal scan

7 % over scan of CRT effective

screen area

Under scan

5 % underscan of CRT effective

screen area

Over scan

20 % over scan of CRT effective

screen area

H. linearity

Less than 4.0 % (typical)

V. linearity

Less than 4.0 % (typical)

Convergence

Central area:

Less than 0.4 mm (typical)

Peripheral area: Less than 0.5 mm (typical)

Raster size stability H: 1.0%, V: 1.5%

High voltage regulation

3.5 %

Color temperature

D65/D56/D93, selectable

USER (3,200K-10,000K, factory

setting is D65)

For PVM-20M2MDU/20M2MDE/20M2MDA

Normal scan

7 % over scan of CRT effective

screen area

Under scan

5 % underscan of CRT effective

screen area

Over scan

20 % over scan of CRT effective

screen area

H. linearity

Less than 5.0 % (typical) Less than 5.0 % (typical)

V. linearity

Convergence

Central area:

Less than 0.6 mm (typical)

Peripheral area: Less than 1.0 mm (typical)

Raster size stability H: 1.0%, V: 1.5%

High voltage regulation

Color temperature

D65/D56/D93, selectable

USER (3,200K-10,000K, factory

setting is D65)

Inputs (common to all models)

LINE A

BNC connector, 1Vp-p ±6 dB, sync VIDEO IN

negative

AUDIO IN

Phono jack (×1), -5 dBua), more than

47 kilo-ohms

LINE B

Y/C IN

4-pin mini-DIN (×1)

See the pin assignment on page 37.

**AUDIO IN** 

Phono jack (×1), -5 dBu<sup>a)</sup>, more than

47 kilo-ohms

RGB/COMPONENT A/B

R/R-Y,G/Y,B/B-Y IN: BNC connector (×3)

R, G, B channels: 0.7 Vp-p, ±6 dB

Sync on green: 0.3 Vp-p, negative

R-Y, B-Y channels: 0.7 Vp-p, ±6 dB

Y channel: 0.7 Vp-p, ±6 dB

(Standard color bar signal of 75%

chrominance)

AUDIO IN

Phono jack (×1), -5 dBu<sup>a)</sup>, more than

47 kilo-ohms

EXT SYNC IN

BNC connector (×1) 4 Vp-p, ±6 dB, sync negative

REMOTE

D SUB 9 PIN (×1), 8 PIN MIN DIN

See the pin assignment on page 37.

a) 0 dBu = 0.775 Vr.m.s.

Outputs (common to all models)

LINE A

VIDEO OUT

BNC connector (×1) loop-through,

Automatic 75 ohms termination

Phono jack loop-through **AUDIO OUT** 

LINE B

Y/C OUT

4-pin mini-DIN (×1) loop-through,

Automatic 75 ohms termination

**AUDIO OUT** 

Phono jack (×1) loop-through

RGB/COMPONENT A

R/R-Y,G/Y,B/B-Y OUT: BNC connector (×3)

loop-through

Automatic 75 ohms termination Phono jack (×1) loop-through

**AUDIO OUT EXT SYNC OUT** 

BNC connector (×1) Automatic 75 ohms termination

DC OUT

8 V/0.8A

Speaker output

Output level: 0.8 W

# General (common to all models)

Classification of equipment

- Evaluated to EN60601-1, EN60601-1-2, UL2601-1, CSA601.1
- Type of protection against electric shock

Class I equipment

- Degree of protection against harmful ingress of water
   Ordinary equipment
- Degree of safety of application in the presence of a flammable anaesthetic mixture

Not protected equipment

- Mode of operation

Continuous operation

 Information concerning type and frequency of technical maintenance
 Not need maintenance equipment

- Main power switch Functional switch

**CRT** 

P-22 phosphor

Operating conditions

0 to +40°C (32 to 104°F) Temperature

700 to 1,060 hPa Pressure

30 to 85% (no condensation) Humidity

Transport and Storage conditions

-10 to +40°C (14 to 104°F) Temperature

700 to 1,060 hPa Pressure

0 to 90% Humidity

Accessories supplied

AC power cord (1)

AC plug holder (1)

Side Cover (2)

Control panel cover (1)

Panel hinge (2)

Remote control connector 8-pin mini

DIN (1)

Interface Manual for Programmers

(1)

Instructions for Use (1)

## For PVM-14M2MDU:

Power requirements 1.2 ~ 0.5A

100 to 240 V AC, 50/60Hz 1)

Dimensions (w/h/d) Approx.  $346 \times 340 \times 431$  mm

 $(13^{5}/8 \times 13^{1}/2 \times 17 \text{ inches})$ 

not incl. projecting parts and controls

Mass

Approx. 16.7kg (36 lb 13 oz)

# For PVM-14M2MDE/14M2MDA:

Power requirements  $1.2 \sim 0.5A$ 

100 to 240 V AC, 50/60Hz1)

Dimensions (w/h/d) Approx.  $346 \times 340 \times 431$  mm

 $(13^{5}/8 \times 13^{1}/2 \times 17 \text{ inches})$ 

not incl. projecting parts and controls

Mass

Approx. 16.7kg (36 lb 13 oz)

1) Use a proper power cord for your local power supply. (See page 22.)

### For PVM-20M2MDU:

Power requirements 1.5 ~ 0.6A

100 to 240 V AC, 50/60Hz 1)

Dimensions (w/h/d) Approx.  $450 \times 458 \times 503$  mm

 $(17^{3}/4 \times 18^{1}/8 \times 19^{7}/8 \text{ inches})$ 

not incl. projecting parts and controls

Mass Approx. 30.0 kg (66 lb 2 oz)

# For PVM-20M2MDE/20M2MDA:

Power requirements 1.5 ~ 0.6A

100 to 240 V AC, 50/60Hz 1)

Dimensions (w/h/d) Approx.  $450 \times 458 \times 503$  mm

 $(17^{3}/4 \times 18^{1}/8 \times 19^{7}/8 \text{ inches})$ 

Approx. 30.0 kg (66 lb 2 oz)

not incl. projecting parts and controls

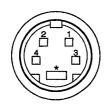
Mass

without notice.

Design and specifications are subject to change

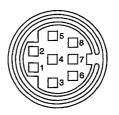
<sup>.....</sup> 

Pin assignment
Y/C IN connector (4-pin mini-DIN)



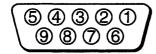
Pin No.	Signal	Description
1	Y-input	1 Vp-p, sync negative, 75 ohms
2	CHROMA subcarrier-input	300m Vp-p (PAL)/286m Vp-p (NTSC), burst Delay time between Y and C: within 0 ± 100 nsec., 75 ohms
3	GND for Y-input	GND
4	GND for CHROMA-input	GND

# REMOTE 1 (8-pin mini DIN)



Pin No.	Signal
1	REMOTE ON/OFF
2	LINE A
3	GND
4	LINE B
5	TALLY
6	OVER SCAN
7	RGB A
8	RGB B

RS-232C (D-sub 9-pin)



Pin No.	Signal
1	
2	RX
3	TX
4	
5	GND
6	_
7	RTS
8	CTS
9	_

# SAFETY CHECK-OUT (US Model only)

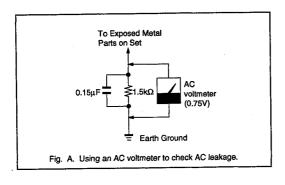
After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

Check metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

### LEAKAGE

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5mA. Leakage current can be measured by any one of three methods.

- A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
- A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this iob.
- 3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75V, so analog meters must have an accurate lowvoltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)



# (CAUTION)

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PRINTED ON THE CRT, AFTER REMOVING THE ANODE.

### WARNING!!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING!!
COMPONENTS IDENTIFIED BY SHADING AND MARK A ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

# (ATTENTION)

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURTCIRCUITER L'ANODE DE TUBE CATHODIQUI ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

### ATTENTION!!

AFIN D'EVITER TOUT RISQVE D'ELECTROCUTION PROVENANT D'UN CHÁSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE.

LE CHÁSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ À L'ALIMENTATION SECTEUR.

### ATTENTION AUX COMPOSANTS RELATIFS ÀLA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÈS PAR UNE TRAME ET PAR UNE MAPQUE △ SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIECES CONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÉCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY. LES RÉGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT SONT IDENTIFIES DANS LE PRÉSENT MANUEL. SUIVRE CES PROCÉDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNEMENT EST SUSPECTÉ.

# **TABLE OF CONTENTS**

1.	GENERAL	6.	DIAGRAMS	
	Warining 1-1	6-1.	Block Diagrams	6-1
	Precautions 1-2	6-2.	Frame Schematic Diagram	6-13
	Features 1-2	6-3.	Circuit Boards Location	6-15
	Location and Function of Parts and Controls 1-3	6-4.	Schematic Diagrams and Printed Wiring	
	Using On-Screen Menus 1-5		Boards	6-16
	Power Sources		Schematic Diagrams	
	Attaching the Side Covers 1-7		• H Board	6-18
	Attaching the Control Panel Cover 1-7		• A (1/3) Board	6-25
			• A (2/3) Board	6-30
2.	DISASSEMBLY		• A (3/3) Board	6-35
2-1.	Top and Rear Covers Removal2-1		• M Board	6-39
2-2.	I/O Terminal Board Assy Removal2-1		• G Board	6-39
2-3.	Service Position2-1		• GA Board	6-39
2-4.	H and J Boards Removal2-2		• J Board	6-40
2-5.	Picture Tube and X Board Removal 2-3		• X Board	6-40
			• Q Board	6-41
3.	SET-UP ADJUSTMENTS		• S Board (U/C model)	6-42
3-1.	Preparations (1)		• C Board (14inch)	6-46
3-2.	Preparation (2). Initialization		• C Board (20inch)	6-49
3-3.	Writing Model Data	6-5.	Semiconductors	6-52
3-4.	Picture Output			
3-5.	Landing Adjustment	7.	EXPLODED VIEWS	
3-6.	Convergence Adjustment (1)	7-1.	Chassis [14M2MDU/E/A]	7-1
3-7.	Deflection Yoke Neck Rotation Adjustment 3-8	7-2.	Picture Tube [14M2MDU/E/A]	7-2
3-8.	Convergence Adjustment (2)	7-3.	Chassis [20M2MDU/E/A]	7-3
3-9.	G2 Adjustment	7-4.	Picture tube [20M2MDU/E/A]	7-4
3-10	. White Balance Adjustment 3-10			
3-11	. Sub Brt Adjustmet	8.	ELECTRICAL PARTS LIST	
3-12	Focus Adjustment		• A Board (14inch)	8-1
			• A Board (20inch)	8-12
4.	SAFETY RELATED ADJUSTMENT		• M Board	8-24
4-1.	Confiramation of +B Maximum 4-1		• G Board	8-25
4-2.	Confiramation of Hold-Down Circuit 4-1		• GA Board	8-26
			• C Board (20inch)	8-26
5.	CIRCUIT ADJUSTMENTS		• C Board (14inch)	8-27
5-1.	A Board Adjustment 5-1		• H Board	8-28
5-2.	G and GA Boards Adjustment5-9		• J Board	8-29
			• X Board	8-29
			• S Board	8-29
			• Q board	8-29

# GENERAL

The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

# WARNING

Record these numbers in the spaces provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product. The model and serial numbers are located at the rear. Owner's Record

To prevent fire or shock hazard, do not expose the unit to

Model No.

rain or moisture.

Dangerously high voltages are present inside the unit. Do not open the cabinet. Refer servicing to qualified personnel only.

In the event of a malfunction or when maintenance is necessary, consult an authorized Sony dealer.

environment if disposed carelessly. Please contact our nearest representative office or your local environmental office in case of disposal of this unit. This unit contains substances which can pollute the

# Power Switch

The power switch is a functional switch only.

To isolate the set from the mains supply remove the mains plug from the wall socket.

# FOR CUSTOMERS IN THE UNITED KINGDOM WARNING

THIS APPARATUS MUST BE EARTHED

# IMPORTANT

The wires in this mains lead are coloured in accordance with the following code: GREEN-AND-YELLOW—EARTH

- NEUTRAL

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug PROCEED AS -LIVE

Circuit overloading
Condideration should be given to the connection of the equipment to the supply circuit and the effect that

Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to

uneven mechanical loading.

connected to the terminal on the plug marked with the letter E or by the safety earth symbol = or coloured GREEN or The wire coloured BROWN must be connected to the terminal marked with the letter L or coloured RED. The wire coloured BLUE must be connected to the terminal The wire coloured GREEN AND YELLOW must be marked with the letter N or coloured BLACK. GREEN-AND-YELLOW

Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the

branch circuit (e.g., use of power strips).

Be sure to connect the AC power cord to a grounded outlet.

ratings should be used when addressing this concern.

Reliable earthing

protection and supply wiring. Appropriate consideration of equipment nameplate overloading of circuits might have on overcurrent

Ensure that your equipment is connected correctly — If you are in any doubt consult a qualified electrician.

# Warning

# Important safeguards/notices for use in the medical environments

All the equipments connected to this unit shall be certified according to Standard IEC601-1, IEC950, IEC65 or other IEC/ISO Standards applicable to the

FOR THE CUSTOMERS IN THE USA
This equipment has been tested and found to comply with
the limits for a Class A digital device, pursuant to Part 15 of
the FOC Ruises. These limits are designed to provide
reasonable protection against harmful interference when the
equipment is operated in a commercial evinforment. This
equipment generates, uses, and can radiate radio frequency
energy and, if not installed and usef in accordance with the
instruction manual, may cause harmful interference to radio
communications. Operation of this equipment in a residen-

ital area is likely to cause harmful Interference in which case the user will be required to correct the interference at his

own expense.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

ATTENTION - When the product is installed in a

the patient area\*, the equipment shall be either powered by an isolation transformer or connected via an When this unit is used together with other equipment in additional protective earth terminal to system ground unless it is certified according to Standard IEC601-1 and IEC601-1.

ď

The equipotential terminal

Rear panel

which brings the various parts of a system to the

same potential.

Functional earth terminal

Rear panel

Alternating current

Rear panel

Main power switch. Press to turn the monitor

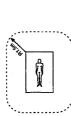
Front pane

Symbols on the unit

on or off.

This symbol indicates

\* Patient Area



The leakage current could increase when connected to other equipment.

m English

Therefore, consideration should be given to installing the

operating ambient temperature of the rack environment

may be greater than room ambient.

if installed in a closed or multi-unit rack assembly, the

a) Elevated operating ambient temperature

equipment in an environment compatible with the manufacturer's maximum rated ambient temperature of

installation of the equipment in a rack should be such that the amount of air flow required for safe operation of

Reduced air flow

0 to +40° (Tmra).

the equipment is not compromised.

Mechanical loading

The operator should take precautions to avoid touching the rear panel input and output circuitry and the patient at the same time. 20M2MDU/20M2MDE/20M2MDA is a video monitor intended for use in a medical environment to display video pictures from cameras or other video system.

Model PVM-14M2MDU/14M2MDE/14M2MDA/

Attention, consult ACCOMPANYING DOCUMENTS Rear panel

# Warning on power connection

Use a proper power cord for your local power supply.

	United State	Canada	Continental Europe	Japan
Plug type	HOSPITAL GRADE	HOSPITAL GRADE	LP-34A	VM1050
Fertfale end	E41395	LL33182	09-S1	VM1010
Cord type	E41395-A	LL76662	H05VV-F	PVCTF
Minimum cord set rating	10A/125V	10A/125V	10A/250V	12A/125V
Safety approval	'n	CSA	VDE	DENTOR

# Table of contents

				_		_		
23	33	2	2	ణ	33	8	3	35
Precautions	Location and Function of Parts and Controls	Front Panel	Rear Panel	Using On-Screen Menus	Power Sources	Attaching the Side Covers34	Attaching the Control Panel Cover	Specifications

# **Precautions**

Features

# On safety

only.	1
Ϋ́С	200
240 V AC only	more
- 1	ting.
it on 100	
e the unit	della
Operate t	The name of the dispersion opposition will
ç	Ė

- consumption, etc. is located on the rear.
  Should any solid object or liquid fall into the cabinet, unplug the unit and have it checked by qualified personnel before consider.
- personnel before operating it any further.

   Unplug the unit from the wall outlet if it is not to be used
- for several days or more.

   To disconnect the AC power cord, pull it out by grasping the plug. Never pull the cord itself.
  - The socket-outlet shall be installed near the equipment and shall be easily accessible.

# On installation

- Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the · Allow adequate air circulation to prevent internal heat
- Do not install the unit in a location near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock. ventilation holes.

# On cleaning

such as thinner of benzine, or abrasive cleansers since they will damage the cabinet. As a safety precaution, unplug the To keep the unit looking brand-new, periodically clean it with a mild detergent solution. Never use strong solvents unit before cleaning it.

# On repecking

Do not throw away the carton and packing materials. They make an ideal container which to transport the unit.

If you have any questions about this unit, contact your authorized Sony dealer.

# On-screen menus

# You can set color temperature, CHROMA SET UP, and other settings by using the on-screen menus

Trinitron tube provides a high resolution picture. Horizontal resolution is more than 600 TV lines at the center of the

Frinitron<sup>1)</sup> picture tube

# The display size is enlarged by approximately 20% and the Overscan mode

center part of the screen is easier to watch.

activates to increase the resolution, resulting in fine picture detail without color spill or color noise.

When NTSC video signals are received, a comb filter

Comb filter

The built-in beam current feedback circuit assures stable

white balance.

Beam current feedback circuit

The signal normally scanned outside of the screen can be monitored in the underscan mode. Underscan mode

# Note

The display splits into two parts (upper and lower). The upper part of the screen monitors the signal fed through the RGB/CM/PONENT A input connectors and lower part of the screen monitors the signal fed through the RGB/COM/PONENT B input connectors. You can compare the When the monitor is in the underscan mode, the dark RGB scanning lines may appear on the top edge of the screen. These are caused by an internal test signal, rather than the Split function input signal.

# two screens

Analog RGB or component (Y, R-Y and B-Y) signals from video equipment can be input through these connectors. Press the RGB/COMPONENT AB select button on the front panel and select RGB or component signals from the

The monitor can display PAL, and NTSC signals. The appropriate color system is selected automatically.

Two color systems available

Analog RGB/component input connectors

Autormanual degaussing
Degaussing of the screen can be performed automatically
when the power is turned on, or manually by pressing the
DEGAUSS button.

The video signal, split into the chrominance signal (C) and the luminance signal (Y), can be input through this connector, eliminating the interference between the two signals, which tends to occur in a composite video signal,

Y/C input connector (S input connector)

on-screen menu.

Five menu languages You can select the language used for on-screen menus from The side covers that protect the ventilation holes from splashes (of medicines, etc.) as much as possible and a control panel cover that protects the control buttons on the Side cover(s) and control panel cover the five languages.

When the external RGB or component signal is input and sync signal is set to external in the on-screen menu, the monitor can be operated on the sync signal supplied from

External sync input connectors

assuring video quality.

# front panel from undesired touching are supplied. EIA standard 19-inch rack mounting

By using an MB-502B (for PVM-14MZMDU/14MZMDE/14MZMDA) or SLR-103A (for PVM-20MZMDU/120MZMDU/20MZMDA) Mounting Bracket (not supplied), the monitor can be mounted in an EIA standard 19-inch rack. For details on mounting, see the instruction manual of the mounting bracket kit.

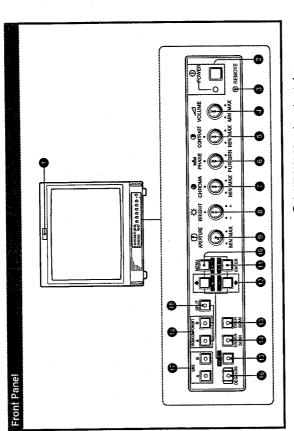
The BNC input connectors on the rear panel are terminated at 75 chms inside, when no cable is connected to the loop-through output connectors. When a cable is connected to an output connector, the 75-ohn termination is automatically released.

Automatic termination (only terminals with the √\\r mark)

an external sync generator.

Trinitron is a registered trademark of Sony Corporation.

# Location and Function of Parts and Controls



This indicator lights up. The tally control connection is Tally indicator

For the pin assignment, see "Specifications" on page 37.

② O POWER switch and indicator Depress to turn the monitor on. The indicator will light up in green. To turn the power off, press this again.

® REMOTE indicator

This indicator lights up in the conditions below:

— When PRESET is set to ON in the menu.

— When REMOTE REA322() is set to REMOTE ONLY or REMOTE & LOCAL in the menu, or

— When REMOTE ON is set via the REMOTE I

**4 AVOLUME control**Tum this control clockwise or counterclockwise to obtain the desired volume.

This control is effective only for the NTSC color system. Turn clockwise to make the skin tones greenish and counterclockwise to make them purplish. counterclockwise to make it weaker. O A PHASE control

Turn clockwise to make the contrast stronger and

CONTRAST control

CHROMA (chrominance) control
 Tum clockwise to make the color intensity stronger and counterclockwise to make it weaker.

Turn clockwise for more brightness and ⑤ ☼ BRIGHT (brightness) control counterclockwise for less.

APERTURE control

Turn clockwise for more sharpness and counterclockwise for less.

When the control is set to MIN, the picture becomes flat without need for corrections.

Note

The APERTURE, CHROMA, PHASE control settings have no effect on the pictures of RGB signals. The PHASE control setting has no effect on the pictures of component signals.

Press to return to the previous screen in the menu. Press to make the menu appear. MENU (EXIT) button

Press to decide a selected item in the menu. ■ ENTER (SELECT) button

# ocation and Function of Parts and Controls

(+)/ 4 (-) buttons

Press to move the cursor ( ) or adjust selected value in

**B** OVERSCAN button

screen is easier to watch. By pressing the button again, the display returns to the normal size (light off). Press (light on) for overscanning. The display size is extended by approximately 20% so that the center of

© UNDERSCAN button
Press (light not for underscaming. The display size is
reduced by approximately 5% so that four corners of the
raster are visible. By pressing the button again, the
display returns to the normal size (light off).

C RESET button

During menu adjustments, press to reset the setting in

the menu.

demagnetized. Wait for 10 minutes or more before activating this Press this button momentarily. The screen will be **●** DEGAUSS button

Note

button again.

The picture rolls vertically while the screen is being demagnetized.

D LINE A/B select buttons

Press to select a signal (light on).

A: Press to monitor the signal fed through the LINE A

input connectors.

B: Press to monitor the signal fed through the LINE B input connectors.

■ RGB/COMPONENT A/B select buttons

Press to select a signal (light on).

A: Press to monitor the signal fed through the RGB/
COMPONENT A input connectors.

B: Press to monitor the signal fed through the RGB/
COMPONENT B input connectors.

When you select RGB signals fed through the RGB/ COMPONENT A and RGB/COMPONENT B input connectors, press this button (light not to split the display into two parts (upper and lower), and monitor the both RGB signals simultaneously.

Make sure the signals fed through the RGB/ COMPONENT A and RGB/COMPONENT B input connectors are synchronized.

22

AUDIO 0

E B Y/C OUT

NE A 5

Rear Panel

0

0 AUDIO

0

1001

For the operation through the menus, see pages 29 to

XI SINC

0

0

000 0

0

0

Ü

0 

0

R/R-Y IN, G/Y IN, B/B-Y IN (BNC)
When "RGB-INT SYNC" or "COMP-INT SYNC" is selected in the RGB A SYSTEM menu, the monitor operates on the sync signal from the G/Y channel. To monitor the RGB signal

Connect to the analog RGB signal output connectors of To monitor the component signal Connect to the R-Y/Y/B-Y component signal output

connectors of a Sony Betacam equipment.

RR.Y OUT, G/Y OUT, B/B.Y OUT (BNC)
Loop-through outputs of the R/R.Y IN, G/Y IN, B/B-Y

released, and the signal inputs to the R/R-Y IN, G/Y IN, B/B-Y IN connectors are output from these connectors. To output the analog RGB signal When the cables are connected to these connectors, the 75-ohms termination of the inputs is automatically

Connect to the analog RGB signal input connectors of a To output the component signal Connect to the R-Y/Y/B-Y component signal input connectors of a Sony Betacam equipment. video printer or another monitor.

To monitor the input signal fed through these connectors, press LINE B select button (light on) on the

front panel.

signals and their loop-through output connectors.

To monitor the input signal fed through these connectors, press LINE A select button (light on) on the ine input connectors for the composite video and audio

Separated Y/C input connectors, audio input connectors, and corresponding loop-through output

Connect the supplied AC power cord to this socket. "\\" means Alternating Current.

AC IN socket

D LINE A connectors

(The -VV- mark Indicates automatic termination.)

Y/C IN (4-pin mini DIN)
Connect to the Y/C separate output connector of a VTR, video camera or other video equipment.

Loop-through output of the Y/C IN connector, Connect to the Y/C separate input connector of a VTR or another

Connect to the video output connector of a video equipment, such as a VTR or a color video camera. For a loop-through connection, connect to the video output

VIDEO IN (BNC)

front panel.

Loop-through output of the VIDEO IN connector. Connect to the video input connector for a VTR or

connector of another monitor. VIDEO OUT (BNC)

When the cable is connected to this connector, the 75-ohms termination of the input is automatically released, and the signal input to the VIDEO IN

Y/C OUT (4-pin mini DIN)

equipment when the analog RGB or component signal is Connect to the audio output connector of video AUDIO IN (phono jack)

AUDIO OUT (phono jack)
Loop-through outputs of the AUDIO IN connector.

When this monitor operates on an external sync signal, connect the signal from a sync generator to this EXT SYNC (external sync) IN (BNC)

75-ohms termination of the input is automatically released, and the signal input to the Y/C IN connector is

output from this connector. AUDIO IN (phono jack)

When the cable is connected to this connector, the

Connect to the audio output connector of a VTR or to a microphone through a suitable microphone amplifier. For a loop-through connection, connect to the audio

output connector of another monitor.

AUDIO OUT (phono jack)

Loop-through output of the AUDIO IN connector.

Connect to the audio input connector of a VTR or

mother monitor.

Connect to the audio output connector of a VTR or to a microphone through a suitable microphone amplifier. For a loop-through connection, connect to the audio

connector is output from this connector.

AUDIO IN (phono jack)

output connector of another monitor.

AUDIO OUT (phono jack)

Loop-intrough output of the AUDIO IN connector.

Connect to the audio input connector of a VTR or

another monitor.

Fo use the sync signal fed through this connector, select 'RGB-EXT SYNC" or "COMP-EXT SYNC" in the EXT SYNC (external sync) OUT (BNC) RGB A SYSTEM menu.

Loop-through output of the EXT SYNC IN connector. Connect to the external sync input connector of video equipment to be synchronized with this monitor. When the cable is connected to this connector, the 75-ohms termination of the input is released, and the signal input to the EKT SYNC IN connector is output from this connector.

G Ground (♦/♣) terminal

**B RGB/COMPONENT B connectors** Connect a GND cable.

SYSTEM menu to set the RGB or COMP (component) signal and the INT SYNC (internal sync) or EXT SYNC For the operation through the menus, see pages 29 to connectors, press the RGB/COMPONENT B select RGB signal or component signal input connectors. To monitor the input signal fed through these button (light on) on the front panel.

Then select one out of four items in the RGB B (external sync) signal.

When "RGB-INT SYNC" or "COMP-INT SYNC" is selected in the RGB B SYSTEM menu, the monitor operates on the sync signal from the GY channel.

To monitor the RGB signal

Connect to the analog RGB signal output connectors of R/R-Y IN, G/Y IN, B/B-Y IN (BNC) a video camera.

equipment when the analog RGB or component signal is Connect to the audio output connector of video connectors of a Sony Betacam equipment. AUDIO IN (phono jack)

Connect to the R-Y/Y/B-Y component signal output

To monitor the component signal

When this monitor operates on an external sync signal, EXT SYNC (external sync) IN (BNC)

To use the sync signal fed through this connector, select "RGB -EXT SYNC" or "COMP-EXT SYNC" in the connect the signal from a sync generator to this RGB B SYSTEM menu.

REMOTE connectors

control command from the equipment.

For the details, see the supplied Interface Manual for RS-232C (D-sub 9-pin)
Connect to the RS-232C control connector of other equipment. You can operate the monitor with the

Connect to the taily output connector of a control console, effects, etc. The tally indicator on the front panel will be turned on and off by the connected REMOTE 1 (8-pin mini DIN)

You can also connect a remote controller using this For the pin assignments of these connectors, see "Specifications" on page 37.

You can use this connector as a power source for the DC OUT 8V/0.8A connector other equipment. DC 8V/0.8A is output.

# 8

27

Before connecting the video equipment, see "Important safeguards/notices for use in the medical environments" on

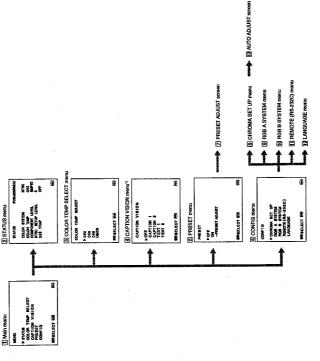
Note

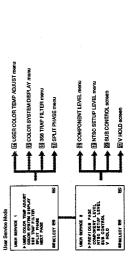
# Using On-Screen Menus

# Menu Configuration

The flow chart shows the different levels of on-screen menus that you can use to make various adjustments and

For details of each menu, see pages 30 to 32.





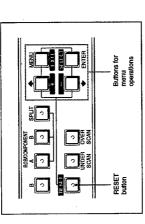
CAPTION VISION in the Main menu is designed for an exclusive use with the PVM-20M2MDU and 14M2MDU models.

# Using On-Screen Menus

# Operating through Menus

panel of the monitor. To display the main menu, first press MENU (EXIT). The buttons you can use appear at the There are five buttons for menu operations on the front bottom of the menu screen.

# Functions of the buttons



Buffon	To salect menu item	To adjust selected menu item
MENU	return to the	return to the previous
	previous menu.	menu.
ENTER	decide a selected	select an item.
	item.	
+	move the cursor (▶)	increase selected
	upwards.	value.
	move the cursor (▶)	decrease selected
+	downwards.	value.
		reset current
		adjustment value to the
		factory setting.

(The above items in white type correspond to the marks in

# For PVM-14M2MDE/14M2MDA/20M2MDE/

For the first time when the monitor is turned on, the LANGUAGE menu ([12]) will appear on the screen. So, select the language you want to use. 20M2MDA:

PRIBELECT 1999 PENGLIBH DEUTGCH FRANÇASS ITALIANO ESPAÑOL LANGUAGE

Move the cursor (▶) to the desired language by pressing the ♦/- or • ↑/+ button.

# 2 Press the MENU(EXIT) button.

Unless you press the MENU(EXIT) button in the procedure above, the LANGUAGE menu will always appear whenever you turn on the monitor. Note

# The Contents of Menu Items

The following sentences show the details of each menu

[ ] indicates the factory setting position.

Select an item and press the ENTER (SELECT) button to go to the following menu. Main menu

Shows the current settings. 2 STATUS menu

3 COLOR TEMP SELECT menu

Select the color temperature from among D65, D56, D93 and USTR. USER is set to D65 in the factory setting. You can adjust or change the color temperature in USPR mode (a measuring instrument is needed).

Note
The color temperature of the USER mode can be adjusted in the range from 320K to 10000K.
You can adjust the color temperature of the USER mode in the USER COLOR TEMP ADJUST menu ([14]) of For the details, see USER COLOR TEMP ADJUST the user service mode.

The monitor can display the signal with Caption Vision. To display it, select the caption type in this menu. [4] CAPTION VISION menu This menu is provided only for PVM-20M2MDU/ 14M2MDU.

8

ဗ္ဗ

You can preset each control to a desired level and set it. If you set PRESET to ON, the REMOTTE indicator lights up and the controls on the front panel do not work. The monitor operates with the internal memory settings. For adjustment, select the PRESET ADJUST

[7] PRESET ADJUST screen Adjust CONTRAST, BRIGHT, CHROMA, PHASE, VOLUME, APERTURE in the PRESET menu. [6] CONRIG menu Select an item for adjustment of the monitor.

# B CHROMA SET UP menu

Set to ON to adjust the internal decoder for CHROMA and PHASE (NTSC signal only) after AUTO ADJUST screen ([13]).

[OFF]

J KGB A SYSTEM menu
To monitor the signal fed through the RGB/
COMPONENT A connectors, set the RGB or COMP
(component) signal and the INT SYNC (internal sync)
or EXT SYNC (external sync) signal in this menu.
[RGB-EXT SYNC

# 10 RGB B SYSTEM menu

To monitor the signal fed through the RGB/ COMPONENT B connectors, set the RGB or COMP (component) signal and the INT SYNC (internal sync) or EXT SYNC (external sync) signal in this menu. [RGB-EXT SYNC]

# [I] REMOTE (RS-232C) menu

You can adjust settings and controls by the buttons and controls on the front panel. Select one out of following three modes. REMOTE OFF:

You can adjust settings and controls through the The RS-232C connector does not function. RS-232C connector.

Buttons and controls on the front panel, except the menu operation ones, do not function. REMOTE & LOCAL:

Controls on the front panel do not function. [REMOTE OFF] You can adjust settings and controls both through the RS-232C connector and the front panel buttons.

# 12 LANGUAGE menu

You can select the language used for on-screen menus from the following five languages (English, German, French, Italian, Spanish).

[5] AUTO ADJUST screen Select the color bar signal (full, SMPTE, EIA) and press the ENTER (SELECT) button to start automatic adjustment for CHROMA and PHASE. For these adjustments to be valid, you must select ON in CHROMA SET UP menu ([8]).

# **User Service Mode**

The user service mode is useful when adjusting the settings To enter the user service mode, press and hold the MENU (EXIT) button until the following USER SERVICE 1 and controls except for the above.

To move to the second page of the mode, select "NEXT PAGE" and to return to the first page, select "FREVIOUS PAGE".

PPREVIOUS PAGE COMPONENT LEVEL NISC SETUP LEVEL SUB CONTROL V HOLD USER SERVICE 2 F USER COLOR TEAP ADJUST COLOR SYSTEM DISPLAY 468 TAP FLITER SPLIT PHASE NEXT PAGE USER REPWOF 1 REBELECT FF

# 14 USER COLOR TEMP ADJUST menu RESELECT (FE)

The value of adjustment in this menu works only when "USBR" is selected in the COLOR TEMP SELECT menu (3).

Adjusts the color balance (gain) of the USER mode. ADJUST BIAS: ADJUST GAIN:

When you adjust the color temperature in the USER mode, select a color temperature range before adjusting ADJUST GAIN and ADJUST BIAS. If the adjusted color temperature is between 3200K and 500K, select "3200K-5000K," If the adjusted color temperature is between 5000K and 10000K, select "500K-10000K," Adjusts the color balance (bias) of the USER mode. COLOR TEMP RANGE.

USER COPY:

[5000K-10000K]

Selects the color temperature of the USER mode from among D65, D56 and D93.

# [IS COLOR SYSTEM DISPLAY menu Select the color system display mode. In AUTO, the

kind of color system being used appears on the screen each time you change the signal input,

# 16 358 TRAP FILTER menu

Color spill or color noise may be eliminated if you select ON (NTSC signal only), Normally set it to OFF.

# Using On-Screen Menus

[1] SPLIT PHASE menn
When the SPLIT function is activated, if the lower side picture (the signal fed through the RGB/COMPONENT B input connectors) has some discrepancy of location with the upper side picture, adjust the SPLIT PHASE

Each time you press the \(\Psi(+)\) button, the lower side picture moves left.

When the adjustment is made in the menu, the skew error will occur on the top of the lower side picture.

# [18] COMPONENT LEVEL menu

[NI0/SMPTE] (BETA 0] Select the component level from among three modes. N10/SMPTE: for 100/0/100/0 signal BETA 7.5: for 100/7.5/7.57 signal BETA 0: for 100/0/75/0 signal For PVM-20M2MDE/20M2MDA/14M2MDE/ For PVM-20M2MDU/14M2MDU 14M2MDA

# IB NTSC SETUP LEVEL menu

Select the NTSC setup level from two modes. The 7.5 sepup level is mainly used in north America. The 0 setup level is mainly used in Japan.

For PVM-20MZMDE/20MZMDA/14MZMDE/ For PVM-20M2MDU/14M2MDU

# 20 SUB CONTROL screen

You can finely adjust the controls on the front panel. CONTRAST, PHASE, CHROMA and BRIGHT controls have clicks at the center of their adjustment range. You can adjust the setting of the click position with this feature.

# [2] V HOLD screen

Adjust the vertical hold if the picture rolls vertically.

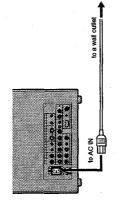
If the rolling of the picture prevents you from watching the screen, select an input that has nothing connected.

32

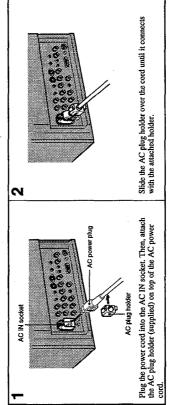
# Power Sources

# House Current

Connect the supplied AC power cord to the AC IN socket on the rear panel and to a wall outlet.



# To connect an AC power cord securally with the AC plug holder

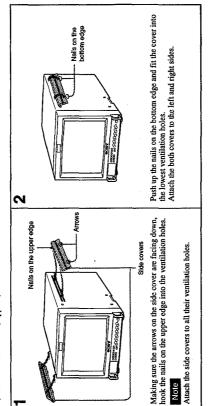


# To remove the AC power cord

Pull out AC plug holder by squeezing the up and down sides.

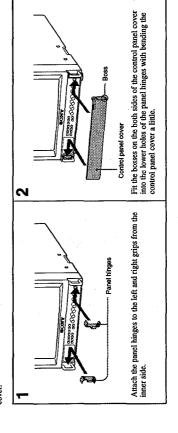
# Attaching the Side Covers

In order to protect the ventilation holes from medicines, etc., attach the side covers (supplied) as shown below.



# Attaching the Control Panel Cover

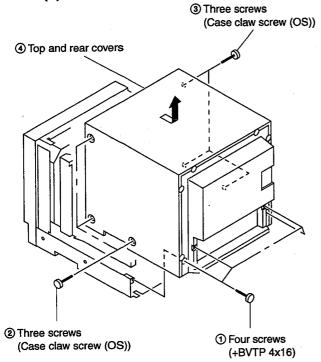
In order to protect the control buttons on the front panel from undesired touching, attach the supplied control panel cover.



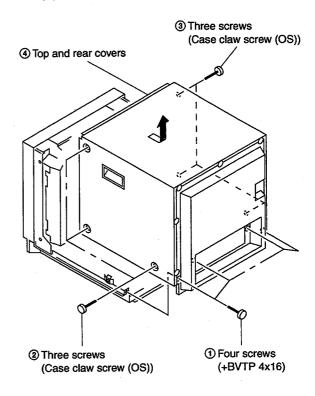
# SECTION 2 DISASSEMBLY

# 2-1. TOP AND REAR COVERS REMOVAL

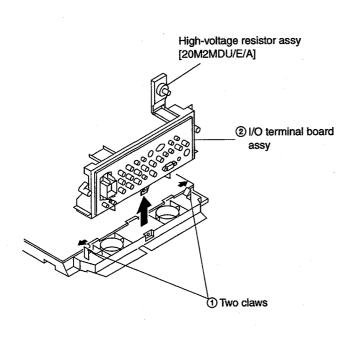
(1) 14M2MDU/E/A



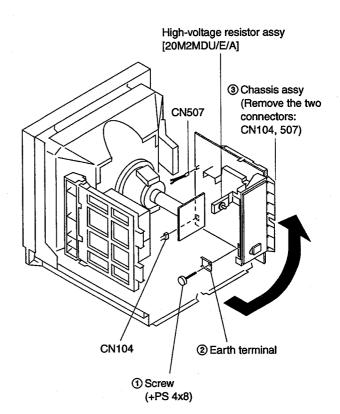
# (2) 20M2MDU/E/A



# 2-2. I/O TERMINAL BOARD ASSY REMOVAL

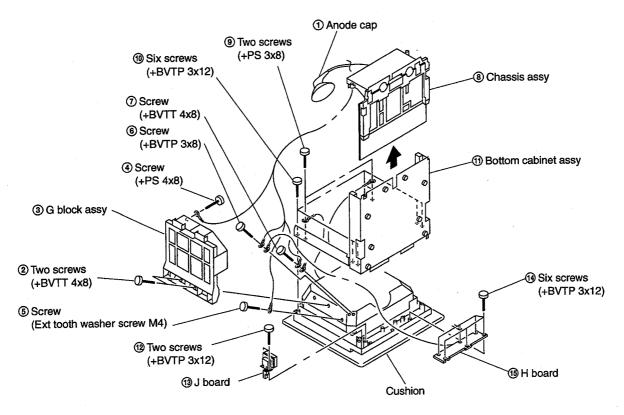


# 2-3. SERVICE POSITION

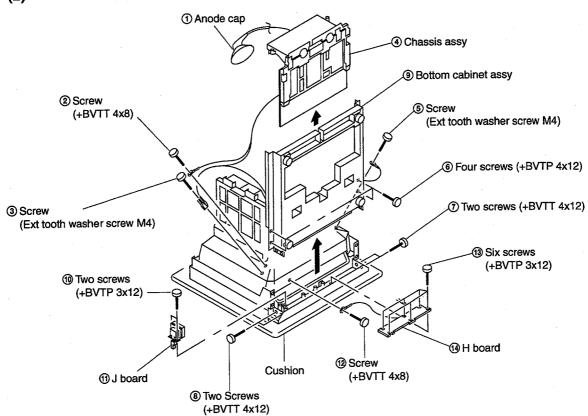


# 2-4. H AND J BOARDS REMOVAL

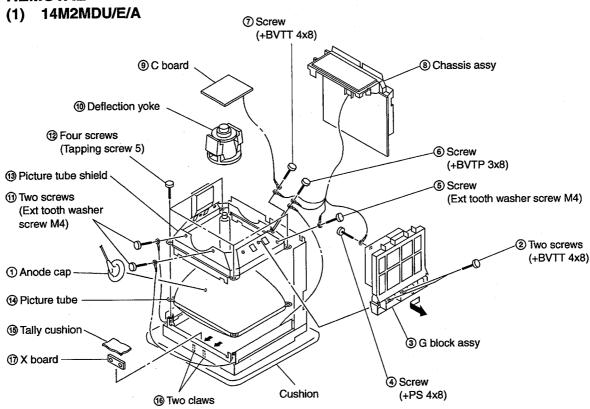
# (1) 14M2MDU/E/A



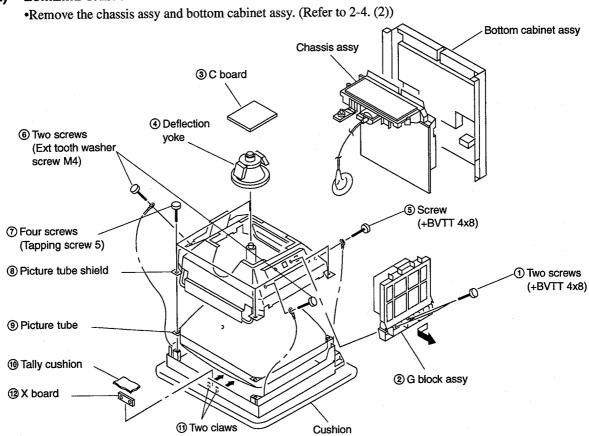
# (2) 20M2MDU/E/A



# 2-5. PICTURE TUBE AND X BOARD REMOVAL



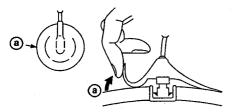
# (2) 20M2MDU/E/A



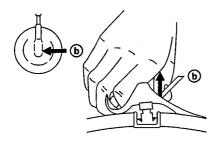
# REMOVAL OF ANODE-CAP

NOTE: Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT, after removing the anode.

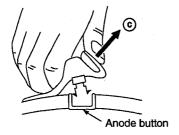
# REMOVING PROCEDURES



① Turn up one side of the rubber cap in the direction indicated by the arrow ②.



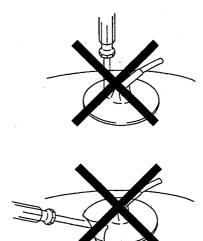
② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow **ⓑ**.



When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow ②.

# • HOW TO HANDLE AN ANODE-CAP

- ① Don't hurt the surface of anode-caps with shaped material!
- ② Don't press the rubber hardly not to hurt inside of anodecaps!
  - A material fitting called as shatter-hook terminal is built in the rubber.
- ③ Don't turn the foot of rubber over hardly! The shatter-hook terminal will stick out or hurt the rubber.



# SECTION 3 SET-UP ADJUSTMENTS

# 3-1. PREPARATIONS (1)

# SERVICE MODE

This set is provided with a switch for service on the front panel that can be used to make various adjustments. The operation method of this switch is explained in detail below.

- 1. Entering the service mode I
- ① Service mode I
  While the menu is displayed, press the [ENTER] and [DEGAUSS] keys simultaneously.
- ② Service mode II

  While the service mode I is displayed, press the [U/S] and [ENTER] keys simultaneously.
- 2. Service mode display

# **Range of Service Mode Display**

(1)	(5)	(4)	(3)	(6)
(2)				

- (1) The service items are largely classified into 16 types displayed by titles.
- (2) The names of the service items or READ/WRITE guidance, etc., are displayed. The names are displayed to the left and the guidance to the right.
- (3) This is the serial number for each of the service items. 1-107.
- (4) This is the adjustment data for the service items that are now stored in the RAM. Adjustments can be made by changing these values, but as long as nothing is written to the ROM the adjustment values will be erased by turning off the power or by reading, so please be careful.
- (5) When the adjustment data that is now displayed is identical with the data in the ROM, the cursor (▶) is displayed.
- (6) The present status is displayed.
  - [\*]: Writing to the ROM. Make sure not to turn off the power while this display is on.
  - [?]: ROM reading error. In this case, an image is output with the standard adjustment data that the microcomputer itself possesses.
  - [¿]: Problem in the I<sup>2</sup>C bus.
- 3. Ending the service mode

In the case of the service mode I, press the [ENTER] and [DEGAUSS] keys simultaneously while the service mode is displayed.

In the case of the service mode II, press the [U/S] and [ENTER] keys simultaneously.

4. Easy ON/OFF of the service mode

If once entering the service mode after having turned on the power, easy ON/OFF is possible by once more pressing the A, B or C switch on the front panel (the LED lights) as long as the power is not turned off or as long as the service mode is not finished.

(No function in service mode II)

- 5. Change of position of the service mode display If the switch is continuously pressed when turning on in the above easy mode, the display position moves in the V direction. This method is used when the display is outside of the effective screen area.
- 6. Change of service items
  The items are returned with the [MENU] key and
  forwarded with the [ENTER] key. When a key is
  continuously pressed, the operation will be repeated.
- 7. Change of service data
  The service data is made larger with the [†] key and smaller with the [↓] key. When continuously pressing the keys, the operation will be repeated.
- 8. Reading of service data
  When reading data from the ROM to the RAM, press the
  [RESET] key once and check than the READ display is
  shown in the guidance, and then press the [RESET] key
  once again. The adjustment data that is written will return
- to its previous state, so please be careful.

  9. Writing of service data
  When writing data from the RAM to the ROM, press the
  [DEGAUSS] key once and check that the WRITE display
  shown in the guidance, and then press the [DEGAUSS]
  key once again. Not only the displayed data will be
  written, but all data, so please be careful.
- 10. Carrying out FACTORY RESETTING

In case the adjustment data has been destroyed for some reason, and you keep pressing the [B/O] key at the beginning of the above reading, the READ guidance will change to FACTORY RESET guidance in approximately 3 seconds so that the factory resetting can be carried out. By once again pressing the [RESET] key after this, resetting will be carried out ([\*] will be displayed as status) and factory resetting will be executed. However, in case the data available at the time of shipment from the factory has been destroyed, or if the ROM has been replaced, etc., or if factory setting mentioned later on has been carried out, factory resetting is executed.

## 11. Carrying out FACTORY SETTING

Make sure to make possible the above factory resetting by making a copy of the adjustment data when replacing the ROM. If you keep pressing the [DEGAUSS] key at the beginning of the above writing, the WRITE guidance will change into FACTORY RESET guidance after approximately 3 seconds. By once again pressing the [DEGAUSS] key after this, setting will be carried out ([\*] will be displayed as status) and the data will be copied. By carrying out this operation, the selection items of the menu and the adjustment values will be reset to the standard conditions, so please be careful. If this operation is carried out once, it cannot be carried out again, but the FACTORY SET FLAG (No. 107) in the service mode can be set to 1.

# 1. SERVICE MAP I

Signify (The setting is vary with the destination.)
Refer to the "Table 3-1-2 SERVICE MAP I (2)."

Table 3-1-1 SERVICE MAP I (1)

No.	SERVICE ITEM		MAX	STD	No.	SERVICE ITEM		MAX	STD
1	NOR 50 DEF	H FREQUENCY	255	85	55	C/T2 D??	GAIN <green></green>	1023	_
2		VIDEO PHASE	255	140	56		GAIN <blue></blue>	1023	500
3		V SIZE	255	170	57	C/T3 D??	3200K SW	1	0
4	NOR 60 DEF	H FREQUENCY	255	96	58		BIAS <red></red>	1023	500
5		VIDEO PHASE	255	128	59		BIAS <green></green>	1023	300
6		V SIZE	255	170	60		BIAS <blue></blue>	1023	400
7	NOR DEF	V CENTER	255	128	61		GAIN <red></red>	1023	700
8		H SIZE	255	100	62		GAIN <green></green>	1023	700
9		PIN PHASE	255	128	63		GAIN <blue></blue>	1023	700
10		PIN AMP	255	128	64	USER C/T ORG	3200K SW	1	0
11		LOWER PIN AMP	255	128	65		BIAS <red></red>	1023	600
12		UPPER PIN AMP	255	128	66		BIAS <green></green>	1023	300
13		SEXY	255	128	67		BIAS <blue></blue>	1023	300
14		V LINEARITY	255	128	68		GAIN <red></red>	1023	800
15		V BOW	63	35	69		GAIN <green></green>	1023	700
16		LOWER V BOW	63	20	70		GAIN <blue></blue>	1023	500
17		V ANGLE	63	20	71	W/B	SUB CON <normal></normal>	255	178
18	U/S DEF	V SIZE <50>	255	140	72		SUB CON <o s=""></o>	255	178
19		V SIZE <60>	255	140	73		SUB BRIGHT	255	69
20		H SIZE	255	128	74	OTHER	LANDING	255	64
21		PIN PHASE	255	128	75		SPLIT PHASE	255	0
22		PIN AMP	255	100	76		DEGAUSS DELAY	127	0
23	O/S DEF	V SIZE <50>	255	190	77		V HOLD	255	128
24		V SIZE <60>	255	190	78		H BLANKING	255	73
25		H SIZE	255	128	79		O/S H BLANKING START	255	73
26		PIN PHASE	255	128	80		O/S H BLANKING END	255	76
27		PIN AMP	255	150	81		V BLANKING <50>	255	82
28	COMPONENT	SUB PHASE	255	130	82		O/S UPPER V BLK <50>	255	14
29		SUB CHROMA <normal></normal>	255	182	83		O/S LOWER V BLK <50>	255	177
30		SUB CHROMA <smpte></smpte>	255	170	84		V BLANKING <60>	255	161
31		R-Y LEVEL	255	163	85		O/S UPPER V BLK <60>	255	19
32	NTSC	BURST GATE PULSE WIDTH	255	52	86		O/S LOWER V BLK <60>	255	230
33		CRYSTAL	255	59	87		HP POSITION	255	145
34		PHASE	255	80	88		HP WIDTH	255	148
35		B-Y PHASE	255	162	89	SYSTEM	358 TRAP FILTER	1	0
36		CHROMA	255	98	90		CAPTION VISION	7	0
37		R-Y LEVEL	255	98	91		COMPONENT LEVEL	3	*
38	PAL	CRYSTAL	255	82	92		NTSC SETUP LEVEL	1	*
39		PHASE	255	110	93		CHROMA SET UP	1	0
40		B-Y PHASE	255	122	94		COLOR SYSTEM DISPLAY	3	0
41		CHROMA	255	109	95		COLOR TEMPERATURE	3	0
42		R-Y LEVEL	255	121	96		USER PRESET	1	0
	C/T1 D??	3200K SW	1	0	97		LANGUAGE	7	0
44		BIAS <red></red>	1023		98		RGB MODE A	3	1
45		BIAS <green></green>	1023		99		RGB MODE B	3	1
46		BIAS <blue></blue>	1023		100		AGING MODE	1	0
47		GAIN <red></red>	1023		101		REMOTE MODE KEY	1	0
48		GAIN <green></green>	1023	700	102		MODEL	31	*
49		GAIN <blue></blue>	1023		103		COLOR TEMP DISP 1	127	65
50	C/T2 D??	3200K SW	1	0	104		COLOR TEMP DISP 2	127	56
51		BIAS <red></red>	1023		105		COLOR TEMP DISP 3	127	93
52		BIAS <green></green>	1023		106		REMOTE ADDRESS	63	1
53		BIAS <blue></blue>	1023		107		FACTORY SET FLAG	1	0
54		GAIN <red></red>	1023	800					

Table 3-1-2 SERVICE MAP I (2)

Model Name	Component level	NTSC Set-up level	Model
PVM-20M2MDU	1	1	0
PVM-20M2MDE	2	0	2
PVM-20M2MDA	2	0	3
PVM-14M2MDU	1	1	4
PVM-14M2MDE	2	0	6
PVM-14M2MDA	2	0	7

# 2. SERVICE MAP II

Table 3-1-3 SERVICE MAP II

	OFFINIOR ITEM		STD	
	SERVICE ITEM	MAX	14inch	20inch
1	W/B NTSC R-Y	255	174	171
2	W/B NTSC B-Y	255	161	158
3	W/B PAL R-Y	255	176	180
4	W/B PAL B-Y	255	160	158
5	W/B COMPONENT A R-Y	255	161	174
6	W/B COMPONENT A B-Y	255	156	178
7	W/B COMPONENT B R-Y	255	161	174
8	W/B COMPONENT B B-Y	255	156	178
9	W/B RGB A R-Y	255	114	127
10	W/B RGB A B-Y	255	131	134
11	W/B RGB B R-Y	255	114	127
12	W/B RGB B B-Y	255	131	134
13	LINE A CONTRAST	100	50	50
14	LINE A BRIGHT	100	50	50
15	LINE B CONTRAST	100	50	50
16	LINE B BRIGHT	100	50	50
17	RGB A CONTRAST	100	50	50
18	RGB A BRIGHT	100	50	50
19	RGB B CONTRAST	100	50	50
20	RGB B BRIGHT	100	50	50

# 3-2. PREPARATION (2). INITIALIZATION

\* Supply composite video or component signals as shown in Table 3-2.

Table 3-2

Signal	-	Details of signal	Standard level P-W
Composite	358NT	100% white	0.714V
video		75% white	0.536V
	PAL	100% white	0.7V
	PAL	75% white	0.525V
		100% white Y	0.7V
·	BETA0	75% white Y	0.525V
Commonant		75%color B-Y, R-Y (P-P for this item only)	0.7V
Component		100% white Y	0.7V
	SMPTE	75% white Y	0.525V
	·	75%color B-Y, R-Y (P-P for this item only)	0.525V
Voice	e/sound	-5dBs	0.436Vrms

- \* In this chapter, \_\_\_\_\_ indicates the control items in the service mode.

  Example: 60 H-FREQ
- \* Before turning off the power after adjustment in the service mode, write the adjustment data. When the power is turned off before writing, adjusted data will all be lost.

# 3-3. WRITING MODEL DATA

1. Write model data on respective models in the service mode at the location of No.102 MODEL in accordance with Table 3-3.

Table 3-3

Model	Model data
PVM-20M2MDU	0
PVM-20M2MDE	2
PVM-20M2MDA	3
PVM-14M2MDU	4
PVM-14M2MDE	6
PVM-14M2MDA	7

2. Write the following data in the service mode at the location of No.103 COLOR TEMP DISP 1.

COLOR TEMP DISP 1

65

 Write the following data in the service mode at the location of No.104 COLOR TEMP DISP 2.
 COLOR TEMP DISP 2

<u>56</u>

 Write the following data in the service mode at the location of No.105 COLOR TEMP DISP 3.
 COLOR TEMP DISP 3

93

\* Standard inspection state Unless otherwise specified in this manual, make adjustment under the following conditions:

APERTURE	MIN	(Turn FLAT fully counterclockwise.)
BRIGHT	50%	(Center click)
CHROMA	50%	(Center click)
PHASE	50%	(Center click)
CONTRAST	80%	(Center click)
VOLUME	50%	

## 3-4. PICTURE OUTPUT

# 1. AC input voltage setting

- 1. Input VIDEO signals and AUDIO signals to respective terminals on the connector panel.
- 2. Set the sliduck AC voltage as shown in Table 3-4.

Table 3-4

Group of models	Voltage
PVM-20M2MDU PVM-14M2MDU	AC 120±3V (Same as above)
PVM-20M2MDE PVM-20M2MDA PVM-14M2MDE PVM-14M2MDA	AC 220±3V (Same as above)

## 3-5. LANDING ADJUSTMENT

- 1. CONT ... MAX
  BRT ... Conspicuous position
- 2. Roughly adjust the white balance, G2, and convergence.
- 3. Switch the rotary SW of the single color switch to change the color into green only.
- 4. Adjust the purity knob so that the green will come to the center of the screen. Make R and B almost identical. (Fig. 3-1)
- 5. Switch to B only, R only, and G only and verify each. (Figs.3-1, 3-2, and 3-3)
- 6. Bring the deflection yoke gradually forward and adjust the deflection yoke so that R and B on both sides of the screen will be green. (Fig.3-2 n Fig. 3-3)
- 7. If the deflection yoke comes forward too much, the pattern shown in Fig.3-4 will appear. If so, move the deflection yoke backward. (Fig.3-4 n Fig.3-3)
- 8. Switch the single color switch to B and verify the single color. (Fig.3-6)
- 9. Switch the single color switch to R and verify the single color. (Fig.3-9)
- 10. When two colors are mixed, set the mixed color as the standard, and repeat operations 6 and 7.
- 11. Switch to an all-white signal and check the uniformity.
- 12. When the deflection yoke position is determined, fasten it with the fixture.

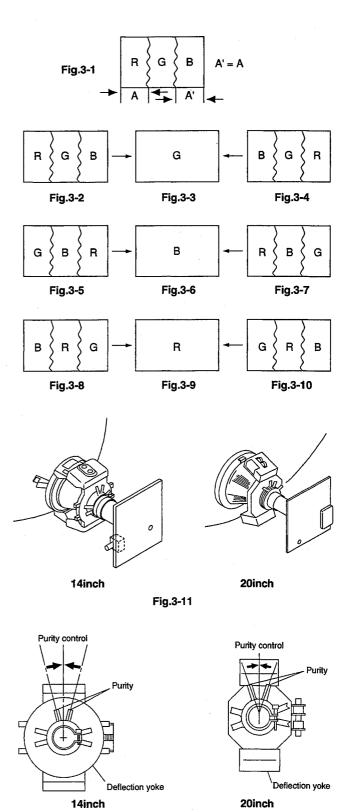


Fig.3-12

# 3-6. CONVERGENCE ADJUSTMENT (1)

- Input a dot pattern signal.
   CONT ..... Conspicuous position BRT ...... MIN
- 2. Align the horizontal R, G, and B dots at the center of the screen with the H-START VR.
- When H-CENT is changed after H-STAT adjustment, readjust H-STAT. (H-STAT will change by means of H-CENT VR.)
- 3. Align the vertical location of R, G, and B in the center of the screen with the V-STAT Mg. (Fig.3-13, 3-14)
- \* After V-STAT adjustment, paint-lock the knob.

## V-STAT Mg knob

While keeping the angles A and B equal (I = I'), align the vertical convergence.

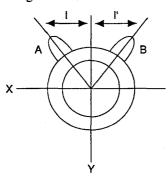


Fig. 3-13 Good example

If the A and B knobs are not symmetrical ( $I \neq I$ ), the focus may deteriorate, beam striking or other adverse effects may occur.

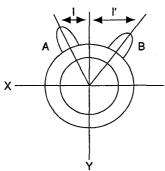


Fig. 3-14 Bad example

4. For HMC, use the BMC Mg to adjust the R and B dots so that they will be symmetrical horizontally with respect to the G dot.

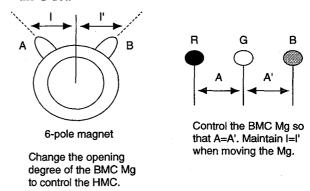


Fig. 3-15

5. For VMC, use the MBC Mg to adjust the R and B dots so that they will be symmetrical vertically with respect to the G dot.

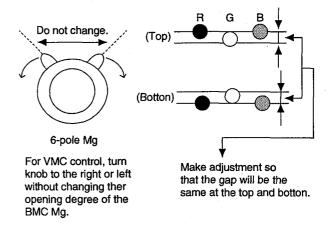
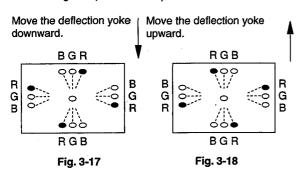


Fig. 3-16

- 6. Repeat adjustments 2. to 5.
- \* The above adjustment may affect the landing, so after adjustment, check the landing again.
- 7. Paint-lock the knobs after adjustment.

# 3-7. DEFLECTION YOKE NECK ROTATION ADJUSTMENT

- If there is nonconvergence on both sides of the X or Y axis of the screen, turn the neck of the deflection yoke in the direction of the arrow to hold the nonconvergence for the entire CRT screen within the tolerance.
  - (1) Reverse cross misconvergence pattern
- (2) Regular cross misconvergence pattern



- (3) Pattern of left-sided deflection yoke
- (4) Pattern of right-sided deflection yoke

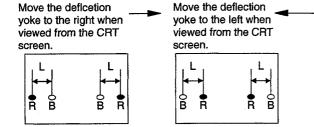


Fig. 3-19

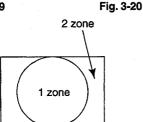


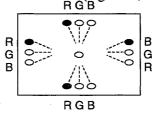
Fig. 3-21

2. Insert the wedge between the deflection yoke and CRT funnel to lock the deflection yoke. (Fig.3-22)



Fig. 3-22

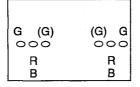
3. The following patterns cannot be corrected by turning the neck. (Figs.3-23, 3-24, and 3-25)



\* Gun rotatuon

The X-axis and Y-axis beams are distorted on both sides.

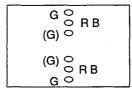
Fig. 3-23



\* HCR Large(Small)

The horizontal portion of the G raster is wider(narrower) than that of the RB raster on both sides of the screen.

Fig. 3-24



\* VCR Large(Small)

The vertical portion of the G raster is wider(narrower) than that of the RB raster on both sides of the screen.

Fig. 3-25

# 3-8. CONVERGENCE ADJUSTMENT (2)

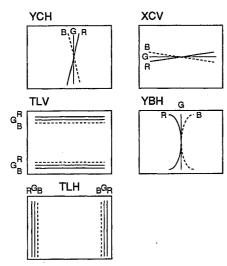


Fig. 3-26 Convergence compensation VR,coil, and compensator

Note: When adjustment is insufficient, use permalloy for perfect adjustment.

## 1. 14 inch Models

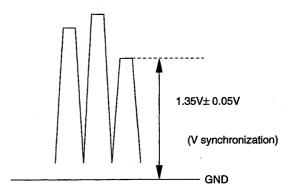
- 1. Input a cross-hatch signal.
- 2. Make adjustment with the TLV, YCH VR, and XCV coils of the deflection yoke to minimize nonconvergence.
- 3. When the nonconvergence of the TILT component is included in the horizontal convergence, insert the TLH compensator into the deflection yoke for adjustment. (Fig. 3-26)

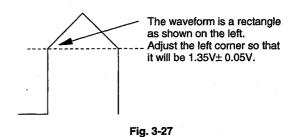
# 2. 20 inch Models

- 1. Input a cross-hatch signal.
- 2. Make adjustment with the XCV coil of the deflection yoke to minimize nonconvergence.
- 3. When the nonconvergence of the TILT component is included in the vertical convergence, insert the TLV compensator into the deflection yoke for adjustment. (Fig.3-26)

# 3-9. G2 ADJUSTMENT

- 1. Input a 525 monoscope signal.
- 2. Connect the probe of the oscilloscope to TP403 on the A board.
- 3. Measure the lowest reference pulse of the three.
- 4. Make adjustment with SCREEN VR so that the left end of the waveform will be  $1.35 \text{ V} \pm 0.05 \text{ V}$ .





# 3-10. WHITE BALANCE ADJUSTMENT

- 1. Input a 525 monoscope signal. (Input from LINE A or B with no burst.)
- 2. Set as follows:

CONT 0%

BRT 50%

3. Adjust SUB-BRIGHT in the service mode so that the 20-tone gray scale will be as follows:

0 and 5 IRE → Cut off

10 IRE → Slight glow

- 4. Input 525 all-white (COMPOSITE signal without burst).
- 5. Set CONT VR to 80%.
- 6. Adjust the all-white luminance so that the screen luminance will be 3 NIT.
- 7. Press MENU and select COL TEMP SELECT.
- 8. Select 6500K.

Set 3200K sw to "0" for both T1, T2 and T3.

- 9. Put the unit into the service mode.
- 10. Adjust to the standard values with <RED> and <BLUE> of <a href="https://rec.inglines.org/rec.inglines.com/rec.inglines.org/rec.inglines.com/rec.inglines.org/rec.inglines.or
- 11. Switch the all-white signal luminance to 100 IRE.
- 12. Adjust to the standard values with <RED> and <BLUE> of [CTI 6500K GAIN] . (Refer to NOTE:)
- 13. Repeat adjustment (10, 11, and 12) until the adjustment is complete, and then write the adjustment data.
- 14. Press MENU and select COL TEMP SELECT.
- 15. Select 5600K.
- 16. Adjust C/T2 5600K BIAS C/T2 5600K GAIN in the same manner as adjustments 10. to 13..
- 17. The adjustment is complete, and then write the adjustment data.
- 18. Press MENU and select COL TEMP SELECT.
- 19. Select 9300K.
- 20. Adjust C/T3 9300K BIAS C/T3 9300K GAIN in the same manner as adjustments 10. to 13.. (Refer to NOTE:)
- 21. The adjustment is complete, and then write the adjustment data.

NOTE: Set cut-off to 3NIT.

Fix as follows: <GREEN> BIAS GREEN ... "300" GAIN GREEN ... "700"

<Standard Values>

**COL TEMP 1 ... 6500K + 8MPCD** 

**COL TEMP 2 ... 5600K + 8MPCD** 

**COL TEMP 3 ... 9300K + 8MPCD** 

## **3-11. SUB BRT ADJUSTMENT**

- 1. Input a 525 monoscope signal.
- 2. Set as follows:

CONT.... Min

BRT .... 50%

- 3. Select SUB BRIGHT in the service mode.
- 4. Adjust SUB BRIGHT so that 10 IRE glows slightly and 0 IRE is cut off.

# 3-12. FOCUS ADJUSTMENT

## 1. 20 inch Models

- 1. Input a 525 monoscope signal.
- Adjust the focus to optimize the focus on the characters "30" at

the center of the screen with FOCUS PACK VR.

- 3. Switch to an all-white signal and check the uniformity.
- 4. After focus adjustment, paint-lock the FOCUS PACK VR knob.

### 2. 14 inch Models

- 1. Input a 525 dot signal.
- Make adjustment so that the center dot and center of the dots on both sides are not separated with using RV707 on C board.
- 3. Check that the resolution is more than 600 lines by means of a digital monoscope signal.
- 4. Change an all-white signal, and check that the magenta ring is unconspicuous by means.

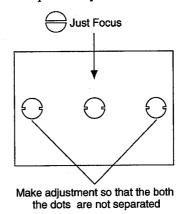


Fig. 3-28

# SECTION 4 SAFETY RELATED ADJUSTMENT

When the parts (with a → , a mark on the circuit diagram) shown below are replaced, confirm the matters described in items 4-1 and 4-2 shown below.

### R1536

R551, R506, R519, R518, R516, R515, R508, R517, R1536, R1560, R1537, C549, C512, C513, C523, C592, D501, D533, Q500, Q511, IC500, and IC507

When the following parts are replaced, check the +B voltage: IC600, IC602, D610, C615, C631, C621, C632, and T603

## **Confirmation procedure**

- 1. Input 120 VAC.
- 2. Input a monoscope signal, and minimize CONTRAST and BRIGHT.
- 3. Check that the voltage of the CN605 ① pin is 115.7 VDC.

## 4-1. CONFIRAMATION OF +B MAXIMUM

Standard: Less than 115.7 VDC(CN605 pin ①) Check Condition Input voltage: 130 VAC

Note: Use NF Power Supply or make sure that distortion factor is 3% or less.

Input signal: Monoscope

Controls : BRT & CONT → Normal

# 4-2. CONFIRAMATION OF HOLD-DOWN CIRCUIT

Check Condition Input voltage: 130 VAC

Input signal: White &Dot

Controls: BRT & Cont → Max. & Min.

# 4-2-1. Hold-Down Circuit (+B)

a) Adjust the beam current to 1000±50μA (20 inch), 600±50μA (14 inch) with the pin ② of CN605 with the external DC power supply (less than 130.0 VDC (20 inch), 127.0 VDC (14 inch))to the point just before the holddown circuit works.

Input Signal: White

b) Adjust the beam current to 100±20μA (20 inch), 80±20μA (14 inch) with the pin ④ of CN605 with the external DC power supply (less than 131.0 VDC (20 inch), 127.0 VDC (14 inch)) to the point just before the hold-down circuit works.

Input Signal: Dot

# 4-2-2. Hold-Down Circuit (3rd Wire voltage of FBT)

Check item: Check of pin ① of IC500 voltage: more than 110.0VDC

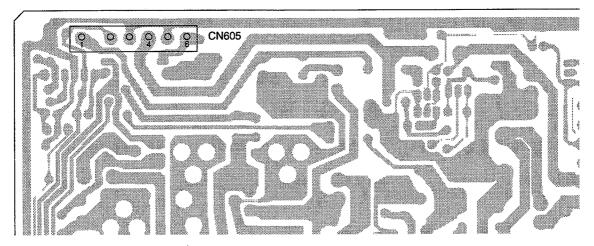
a) Adjust the beam current to 1000±50μA (20 inch), 600±50μA (14 inch) with the pin ① of IC500 with the external DC power supply (less than 141.0 VDC)to the point just before the hold-down circuit works.

Input Signal: White

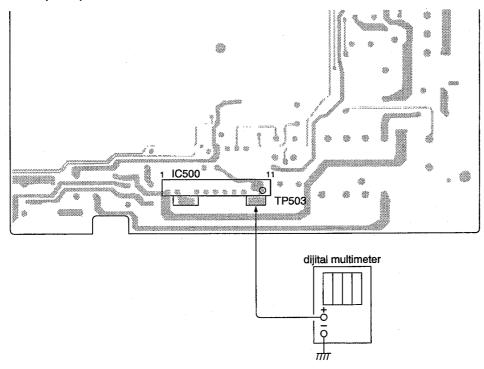
b) Adjust the beam current to 100±20μA (20 inch), 80±20μA (14 inch) with the pin ① of IC500 with the external DC power supply (less than 143.0 VDC (20 inch), 141.0 VDC (14 inch))to the point just before the hold-down circuit works.

Input Signal: Dot

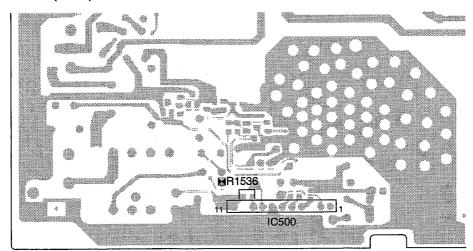
# G board



# A board (A side)

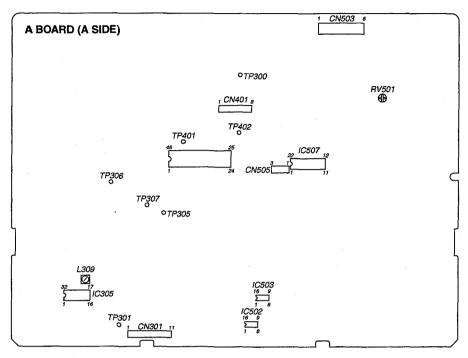


# A board (B side)



# SECTION 5 CIRCUIT ADJUSTMENTS

# 5-1. A BOARD ADJUSTMENT



# 1. PREPARATION/SIGNAL SPECIFICATIONS

# 1. Signal specifications

\* Supply a composite video or component signals from the CN301 connector. Refer to Table 5-1 to take into consideration the effect on the Q board.

The level of the signal to supply should equal to values shown in Table 5-1 plus/minus 2% max.

Table 5-1

145.00					
		I		Reduction	
Signal		Details ofsignal	level	rate	supply
Olgridi		Dotalis disignal	(Pedestal	%	level
			white)		(P·W)
ŀ		100% white	0.714V	93%	0.664V
		75% white	0.536V	93%	0.498V
	358NT	Burst	1		
Composite	000.11	(Green section)	286mV	94%	269mV
video		(P-P for this	(632mV)	(94%)	(594mV)
		item only)			
(75% color		100% white	0.7V	94%	0.651V
bar)	ĺ	75% white	0.525V	94%	0.488V
	PAL	PAL burst			
		(Green section)	300mV	94%	282mV
	1	(P-P for this	(664mV)	(94%)	(624mV)
	<u> </u>	item only)			
		100% white	0.7V	94.8%	0.664V
	}	75% white	0.525	94.8%	0.498V
	BETA 0	75% color			
Compo-	DEIMO	B-Y, R-Y	0.7V	94.8%	0.664V
nent		(P-P for this	0.71	U-1.070	0.00-1
		item only)			
	]	100% white	0.7V	94.8%	0.664V
(75% color		75% white	0.525V	94.8%	0.498V
bar)	SMPTE	75% color			
		B-Y, R-Y	0.525	94.8%	0.498V
		(P-P for this			
		item only)			

# 2. Preparation

\* In this chapter, \_\_\_\_\_ indicates the control items in the service mode.

Example: 60 H-FRQ

Write the applicable model data at the location of NO.102 MODEL in the service mode.

PVM-20M2MDU....0

PVM-20M2MDE .... 2

PVM-20M2MDA .... 3

PVM-14M2MDU .... 4

PVM-14M2MDE .... 6

PVM-14M2MDA .... 7

## 2. ADJUSTMENT OF DEFLECTION SYSTEM

# 1. Adjustment of horizontal oscillation frequency

- 1. Input a 525 monoscope signal.
- 2. Set as follows:

CONT ... 80%

BRT .... 50%

- 3. Set the unit in the service mode.
- Connect the IC507 ①PIN on the A board to GND via the 100μ/16V chemical capacitor. (Use CN505③PIN for GND.) Or insert the H-FREQ jig into CN505.

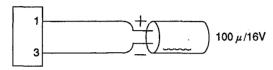
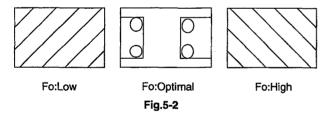


Fig.5-1 H-FREQ jig

- 5. Adjust 60 H-FREQ so that the slanting lines on the screen will be vertical. (Fig.5-2)
- 6. Input a 625 monoscope signal.
- 7. Adjust 50 H-FREQ so that the slanting lines on the screen will be vertical. (Fig.5-2)



## 2. H BLANKING adjustment

- 1. Input a 525 monoscope signal.
- 2. Set as follows: CONT ... 80% BRT .... 50%
- 3. Set the unit in the service mode.
- 4. Observe the anode of TP300 or D516 with an oscilloscope, and adjust <u>H-BLANKING</u> so that the waveform will be as shown in Fig.5-3.

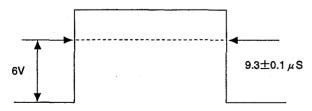
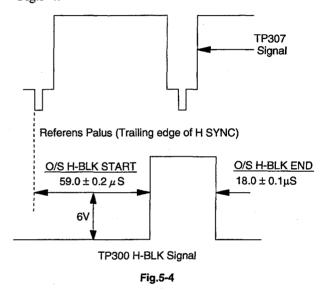


Fig.5-3

3. O/S H BLANKING adjustment

- 1. Input a 525 monoscope signal.
- 2. Set the unit in the OVER SCAN mode.
- 3. Set as follows : CONT ... 80% BRT .... 50%
- 4. Set the unit in the service mode.
- 5. Observe the anode of TP307 and TP300 or D516 with an oscilloscope, and adjust O/S H-BLK START and O/S H-BLK END so that the waveform will be as shown in Fig.5-4.



# 4. Picture phase adjustment

- 1. Input a 525 monoscope signal.
- 2. Set the unit in the UNDER SCAN mode.
- 3. Set as follws:

CONT ... Min.

BRT .... Max.

- 4. Set the unit in the service mode.
- 5. Adjust **UNSHSIZE** so that the white frame of the monoscope will be approx. 1 cm to the inside of the effective screen.
- 6. Turn RV501 (H-CENT) so that B = B'.
- 7. Adjust 60 VIDEO PHASE so that the signal area will be in the center (A = A') of the deflection area. (Fig.5-5)
- 8. Input a 625 monoscope signal.
- 9. Adjust 50 VIDEO PHASE in the same manner.

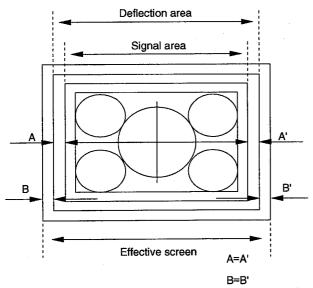


Fig.5-5

## 5. V BLANKING adjustment

- 1. Input a 525 monoscope signal.
- 2. Set the unit in the UNDER SCAN mode.
- 3. Set as follows:

CONT ... Min.

BRT ... Max.

- 4. Set the unit in the service mode.
- 5. Adjust V-BLANKING <60> so that the white frame in the upper section of the monoscope will be about to be blanked.

Note: Blanking up to the point 1H away from the white frame is permissible, but the adjusting center should be up to the point 0.5H away from the frame.

- 6. Input a 625 monoscope signal.
- 7. In the same way as 5. shown above, adjust V-BLANKING <50>.

## 6. Vertical deflection adjustment

- 1. Input a 525 monoscope signal.
- 2. Set as follows:

CONT .... 80%

BRT ..... 50%

- 3. Set the unit in the service mode.
- 4. Roughly adjust NOR 60 V.SIZE so that the size will be 12 frames.

Adjust V.LIN with V.LIN.

Adjust CENT with V.CENT.

V.CENT must be reviewed after adjustment of V.LIN. Adjust NOR 60 V.SIZE so that it will equal the standard value.

- 5. Input a 625 signal.
- 6. Adjust NOR 50 V.SIZE so that the SIZE will equal the standard value.

Table 5-2 NORMAL V. SIZE standard

	525	625
4:3	11.75±0.2 frames	11.2±0.2 frames

# 7. Horizontal deflection adjustment (Normal scan adjustment)

- 1. Input a 525 monoscope signal.
- 2. Set as follows:

CONT ... 80%

BRT .... 50%

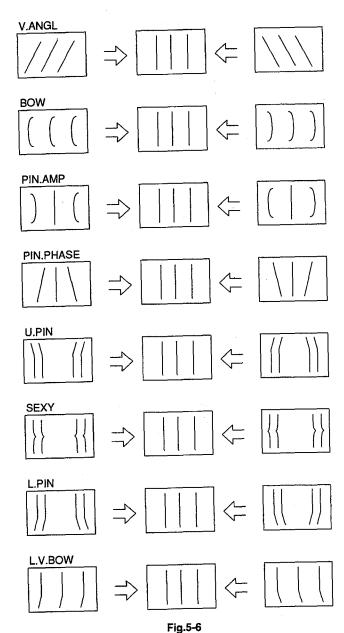
- 3. Set the unit in the service mode.
- 4. Rough adjustment of H.SIZE Roughly adjust NORH.SIZE so that H.SIZE will be 15.75 frames.
- 5. Adjust the horizontal deflection by means of NOR PIN AMP, NOR PIN PHASE, NOR U.PIN AMP, SEXY, V. BOW, V. ANGL, NOR H. SIZE, [L. PIN AMP], and [L. V. BOW].

(While correcting a distorted parallelogram and curvature with V.ANGL and BOW, make adjustment so that the horizontal and vertical lines of the screen will be straight.)

- 6. Input a 625 monoscope signal.
- 7. Confirm that the screen is normal.

Table 5-3 NORMAL H. SIZE standard

	525	625
4:3	15.75±0.2 frames	15.0±0.2 frames



# 8. UNDER SCAN adjustment

- 1. Input a 525 monoscope signal.
- 2. Set as follows:

CONT ..... 80%

BRT ..... 50%

- 3. Set the unit in the U/S mode.
- 4. Set the unit in the service mode.
- 5. Adjust U/S V SIZE <605 so that UNDER V.SIZE will be within the standard.
- 6. Adjust USHSIZE so that UNDER H.SIZE will be within the standard.
- 7. Adjust U/S PIN AMP and U/S PIN-PHASE. (Adjust tracking according to 5., 6., and 7.)
- 8. After adjustment, the white frame of the monoscope shall not be out of the effective screen.

- 9. Input a 625 monoscope signal.
- 10. Adjust U/S V SIZE <505 becomes within the standard value.

Table 5-4 Standerd values for 14 inch

	525	625
U/S H-SIZE	252 ± 2mm	252 ± 2mm
U/S V-SIZE	188 ± 2mm	188 ± 2mm

Table 5-5 Standerd values for 20 inch

	525	625
U/S H-SIZE	364 ± 3mm	364 ± 3mm
U/S V-SIZE	272 ± 3mm	272 ± 3mm

# 9. OVER SCAN adjustment

- 1. Input a 525 monoscope signal.
- 2. Set as follows: CONT ... 80% BRT .... 50%
- 3. Set the unit in the O/S mode.
- 4. Set the unit in the service mode.
- 5. Adjust O/SHSIZE so that H.SIZE becomes 13.6 frames and O/S V SIZE <600 so that V.SIZE becomes 10.2 frames.
- 6. Adjust horizontal deflection section with O/S PIN AMP O/S PIN PHASE .
- 7. Input a 625 monoscope signal.
- 8. Adjust O/S V SIZE <50> becomes within the standard value.

Table 5-6 Standerd value

	525	625
O/S H-SIZE	13.6 ± 0.2 frame	13.0 ± 0.2 frame
O/S V-SIZE	10.2 ± 0.2 frame	9.8 ± 0.2 frame

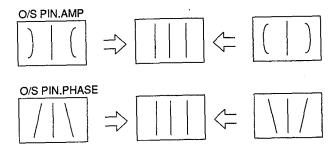


Fig.5-7

# 10. Writing adjustment results

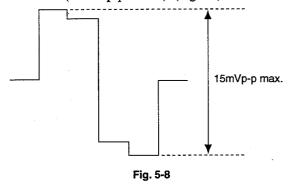
Write the adjustment results.

Note: Do not turn off the power before writing the adjustment results; otherwise, they will all be lost.

# 3. Signal system adjustment

# 1. SUB PHASE adjustment

- Input a component color bar (R-Y) and EXT SYNC. (BETA 0 level signal)
- 2. Set the unit in the EXT SYNC mode for component input.
- 3. Connect the probe of an oscilloscope to IC404 <sup>(3)</sup> PIN or TP402.
- 4. Set the unit in the service mode.
- 5. Adjust <u>SUB PHASE</u> so that the output waveform will be minimum (15 mVp-p or less). (Fig.5-8)



## 2. SUB CHROMA adjustment

- 1. Input component color bars (R-Y, Y, and B-Y). (BETA 0 level signal)
- 2. Set COMPONENT LEVEL to BETA 0 via MENU.
- 3. Connect the probe of an oscilloscope to IC404 ® PIN or TP402.
- 4. Set the unit in the service mode.
- 5. Adjust SUB CHROMA NORMAL so that the peaks of waveforms will be flush with each other as shown in Fig.5-9.

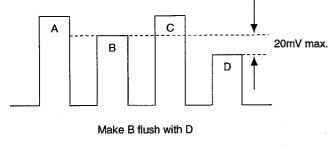
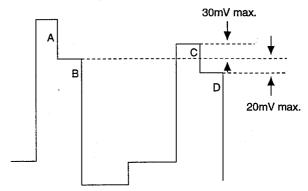


Fig. 5-9

# 3. R-Y LEVEL adjustment

- 1. Input component color bars (R-Y, Y, and B-Y). (BETA 0 level signal)
- 2. Set COMPONENT LEVEL to BETA 0 via MENU.
- 3. Connect the probe of an oscilloscope to IC404 3 PIN or TP401.
- 4. Set the unit in the service mode.
- 5. Adjust R-Y LEVEL COMPONENT so that the peaks of waveforms will be flush with each other as shown in Fig.5-10.

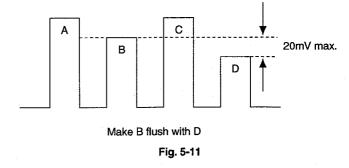


Make adjustment so that B = D as shown above. (20 mV max.) Check that the difference between B and C is 30 mV or less.

Fig. 5-10

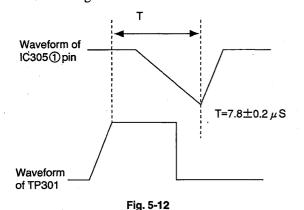
## 4. SMPTE SUB COL adjustment

- 1. Input component color bars (R-Y, Y, and B-Y). (SMPTE level signal)
- 2. Set COMPONENT LEVEL to N10/SMPTE via MENU.
- 3. Connect the probe of an oscilloscope to IC404 **③PIN** or TP402.
- 4. Set the unit in the service mode.
- 5. Adjust SUB CHROMA SMPTE so that the levels of B and D will be the same. (Fig.5-11)



# 5. Adjustment of burst gate pulse width

- 1. Input an NTSC color bar.
- 2. Connect the probe of an oscilloscope to TP301 (COMP-SYNC) and Q363 (E) or IC305 ①PIN. (Exercise care since IC305 (1) PIN is a high-impedance line.)
- 3. Set the unit in the service mode.
- 4. Adjust **BGP WIDTH** so that the output waveforms will be as shown in Fig.5-12.

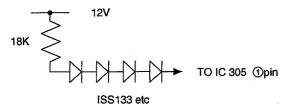


# 6. VXO adjustment

6-1. X'tal 358

- 1) Input an NTSC color bar.
- 2) Connect a frequency counter to IC305 @PIN.
- 3) Set the unit in the service mode.
- 4) Connect IC305 ①PIN as shown in Fig.5-13.
- 5) Adjust NTSC CRYSTAL so that the counter reading will be within the standard values shown below. (Adjustment may be made at a point at which the color flickering stops.)

X'tal 358 standard vlaue: 3579545±20 Hz



(Arrange four diodes as close as possible to ①PIN at the shortest possible distance.)

Fig. 5-13

### 6-2. X'tal 443

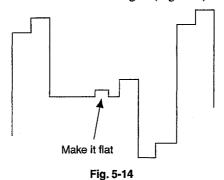
- 1) Input a PAL color bar.
- 2) Connect a frequency counter to IC305 @PIN.
- 3) Set the unit in the service mode.
- 4) Connect IC305 ①PIN in the same way as 6-1. 4) in 6. VXO adjustment.
- 5) Adjust NTSC 443 CRYSTAL in the same way as 6-1. 5) in 6. VXO adjustment.

X'tal 443 standard value: 4433619±20 Hz

# 7. NTSC . PAL color demodulation adjust ment

7-1. NT358PHASE (NORMAL)

- 1) Input an NTSC color bar.
- 2) Connect the probe of an oscilloscope to TP306.
- 3) Set the unit in the service mode.
- 4) Adjust PHASE NTSC 358 NOR so that the burst section of the output waveform will be straight. (Fig.5-14)



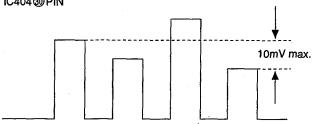
### 7-2. NT 358 B-Y PHASE

# Note: Make adjustment after PHASE adjustment and before CHROMA adjustment.

- Input an NTSC color bar. (Input only the R-Y component. B-Y and Y should be OFF.)
- 2) Connect the probe of an oscilloscope to TP305.
- 3) Set the unit in the service mode.
- 4) Adjust <u>B-Y PHASE NTSC 358</u> so that the color components will be straight.

#### 7-3. NT 358 CHROMA (NORMAL)

- 1) Input an NTSC color bar.
- 2) Connect the probe of an oscilloscope to IC404 ③PIN or TP402.
- 3) Set the unit in the service mode.
- 4) Adjust CHROMANTSC 358 NOR so that the peaks of waveforms will be flush with each other as shown in Fig.5-15. IC404@PIN

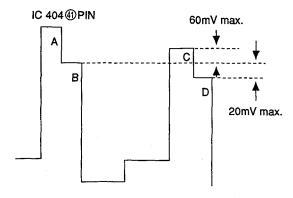


Make adjustment so that the 1st and 4th peaks are at the same level.

Fig. 5-15

#### 7-4. NTSC 358 R-Y LEVEL

- 1) Input an NTSC 358 color bar.
- 2) Connect the probe of an oscilloscope to IC404 **(4)**PIN or TP401.
- 3) Set the unit in the service mode.
- 4) Adjust <u>R-Y LEVEL NTSC 358</u> so that the peaks of waveforms will be flush with each other as shown in Fig.5-16.

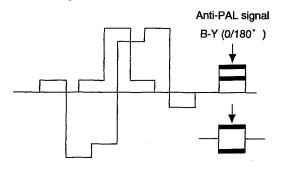


Make adjustment so that B=D as shown above.(20mV max.) Check that the difference between B and C is less than 60mV.

Fig. 5-16

#### 7-5. PAL PHASE (NORMAL)

- 1) Input a PAL SP color bar.
- 2) Connect the probe of an oscilloscope to TP306.
- 3) Set the unit in the service mode.
- 4) Adjust PHASE PAL NOR so that the waveform of the B-Y anti-PAL signal will be "0."

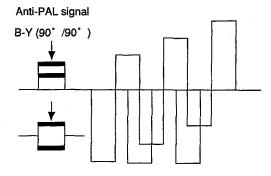


\*The signal waveform differs slightly every hour. Adjust it to "0."

Fig. 5-17 R-Y OUT

#### 7-6. PAL B-Y PHASE

- 1) Input a PAL SP color bar.
- 2) Connect the probe of an oscilloscope to TP305.
- 3) Set the unit in the service mode.
- 4) Adjust **B-Y PHASE PAL** so that the waveform of the R-Y anti-PAL signal will be "0." (Fig.5-18)



\*The signal waveform differs slightly every hour. Adjust it to "0."

Fig. 5-18 B-Y OUT

#### 7-7. PAL CHROMA (NORMAL)

- 1) Input a PAL color bar.
- 2) Connect the probe of an oscilloscope to IC404 **@PIN** or TP402.
- 3) Set the unit in the service mode.
- 4) Adjust CHROMA PAL NOR so that the peaks of waveforms will be flush with each other. (Fig.5-19)

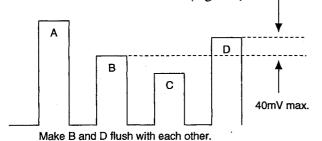


Fig. 5-19

#### 7-8. PAL R-Y LEVEL

## Note: Be sure to set ACC in the ON position before this adjustment.

- 1) Input a PAL color bar.
- 2) Connect the probe of an oscilloscope to IC404 **(1)**PIN or TP401.
- 3) Set the unit in the service mode.
- 4) Adjust R-Y LEVEL PAL so that the peaks of waveforms will be flush with each other as shown Fig.5-20.

#### IC404 @PIN

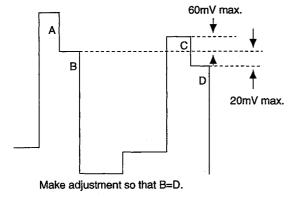


Fig. 5-20

#### 8. W/B plunge correction

- 8-1. Adjustment of NTSC composite
- Input the 525 all white (with burst) cut-off signal to LINE A.
- 2) Select LINE A input.
- Adjust the brightness becomes 3 cd/m² with CONT and BRT VR.
- Turn CHROMA VR to MIN, and measure the color temperature.
- 5) Turn CHROMA VR to MAX, and make adjustment with NTSCB-Y and NTSCR-Y so that the color temperature will be the same as the value measured in item 4).
  Standard adjustment: The difference should be within 2 JND when CHROMA MIN → MAX.

#### 8-2. Adjustment of PAL composite

- 1) Input the 625 all white (with burst) cut-off signal.
- 2) Repeat the operations 8-1. 2), 3), and 4).
- 3) Turn CHROMA VR to MAX, and make adjustment with PALB-Y and PALR-Y so that the color temperature will be the same as the value measured in item 4). Standard adjustment: The difference should be within 2 JND when CHROMA MIN → MAX.

#### 8-3. Adjustment of COMPONENT

- 1) Input the 525 all white cut-off signal to RGB A CH Y. NTSC all white (with burst) may be input.
- 2) Select COMPONENT A CH.
- 3) Repeat the operations 8-1. 3) and 4).
- 4) Turn CHROMA VR to MAX, and make adjustment with CONPONENT A B-Y and CONPONENT A R-Y so that the color temperature will be the same as the value measured in item 4).
  - Standard adjustment: The difference should be within 2 JND when CHROMA MIN Æ MAX.
- 5) Input the 525 all white cut-off signal to RGB CHY. NTSC all white (with burst) may be input.
- 6) Select COMPONENT B CH
- 7) Repeat the operations 8-1. 3) and 4).
- 8) Turn CHROMA VR to MAX, and make adjustment with CONPONENT B B-Y and CONPONENT B R-Y so that the color temperature will be the same as the value measured in item 4).

Standard adjustment: The difference should be within 2 JND when CHROMA MIN  $\rightarrow$  MAX .

#### 9. Adjustment of SUB CONT

- 1) Input the window signal.
- 2) Enter the Normal mode.
- 3) Attach a luminance meter to the window of the CRT surface.
- 4) Make adjustment so that the values will be as shown in Table 5-7 with SUB CON NORM.
- 5) Enter the O/S mode.
- 6) Make adjustment so that the values will be as shown in Table 5-7 with SUB CON < O/S>.

	Table 5-7	Unit (cd/m²)
	14 inch	20 inch
SUB CON <norm></norm>	170±20	150±20
SUB CON <o s=""></o>	170±20	150±20

## 10. Fine adjustment of CONT/BRT level of each input

When the same signal is input to each input terminal, the CONT/BRT level may change slightly. In that case, fine adjustment of CONTRAST/

BRIGHTNESS can

be made for each input terminal.

#### 11. Writing the result of adjustment

Write the result of adjustment in the memory.

#### 5-2. G AND GA BOARDS ADJUSTMENT

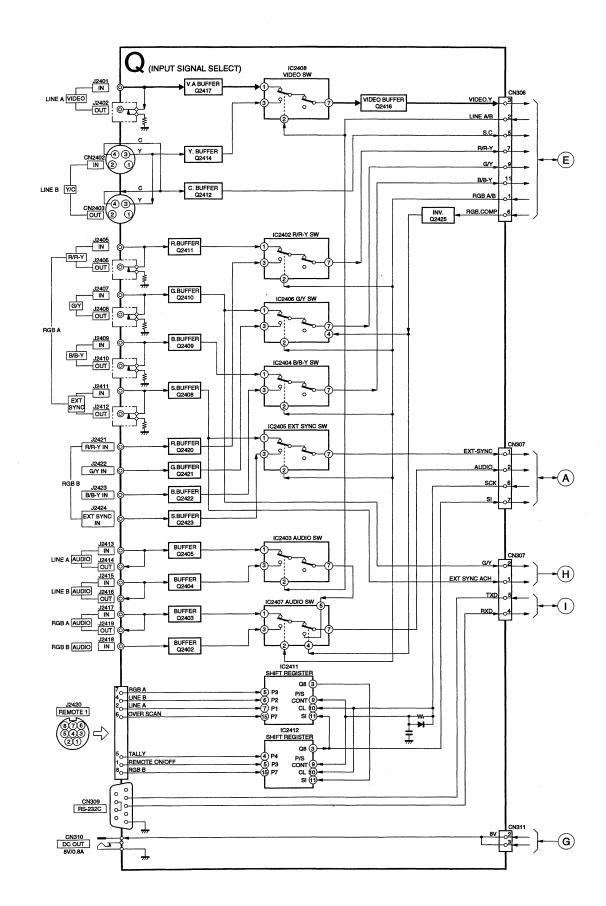
#### 1. Checking the output lines

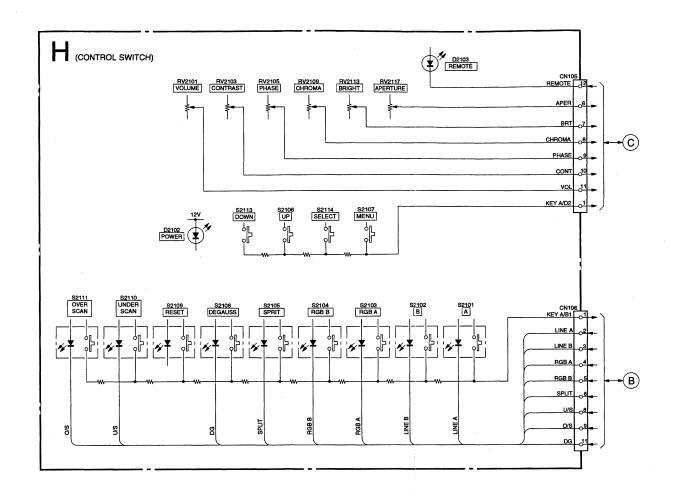
Checking that the output lines meet the standards below.

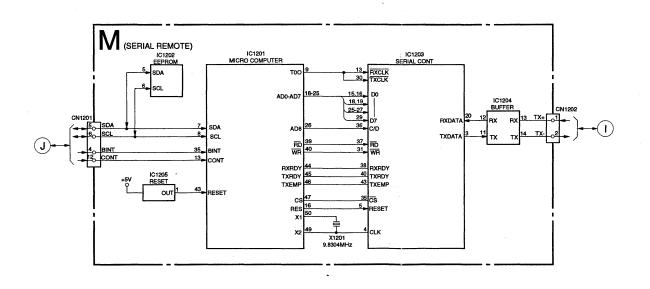
G Board 15V  $14.7 \pm 0.7V$  5V(A)  $5.0 \pm 0.4V$  -15V  $-15.9 \pm 1.0V$ GA Board 8V  $8.0^{+0.3}_{-0.6}V$  . 

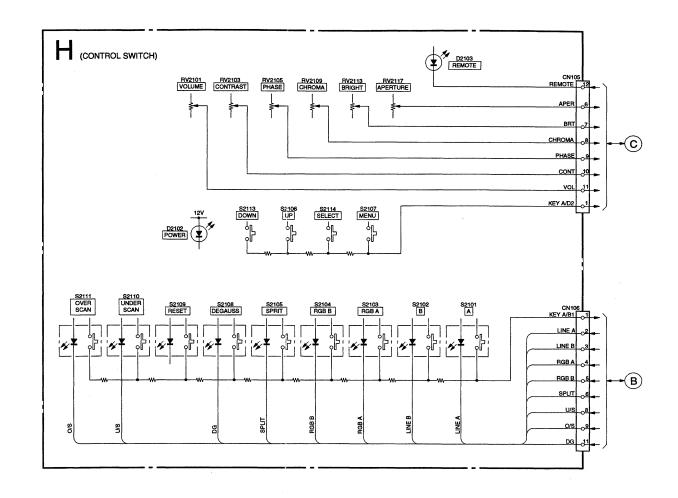
# SECTION 6 DIAGRAMS

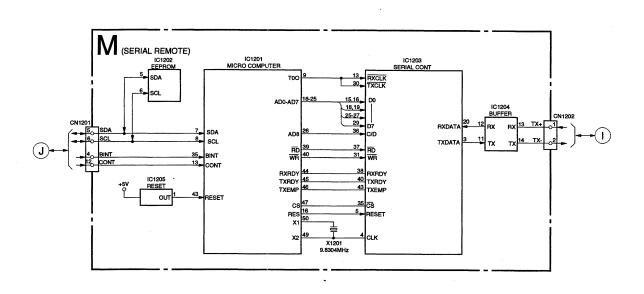
## 6-1. BLOCK DIAGRAMS

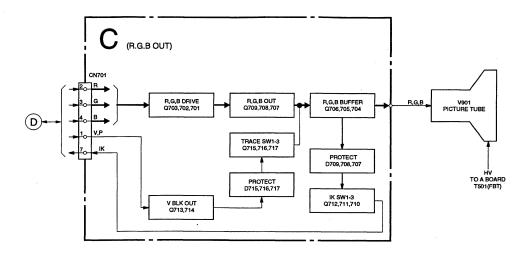


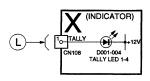




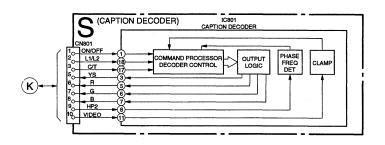


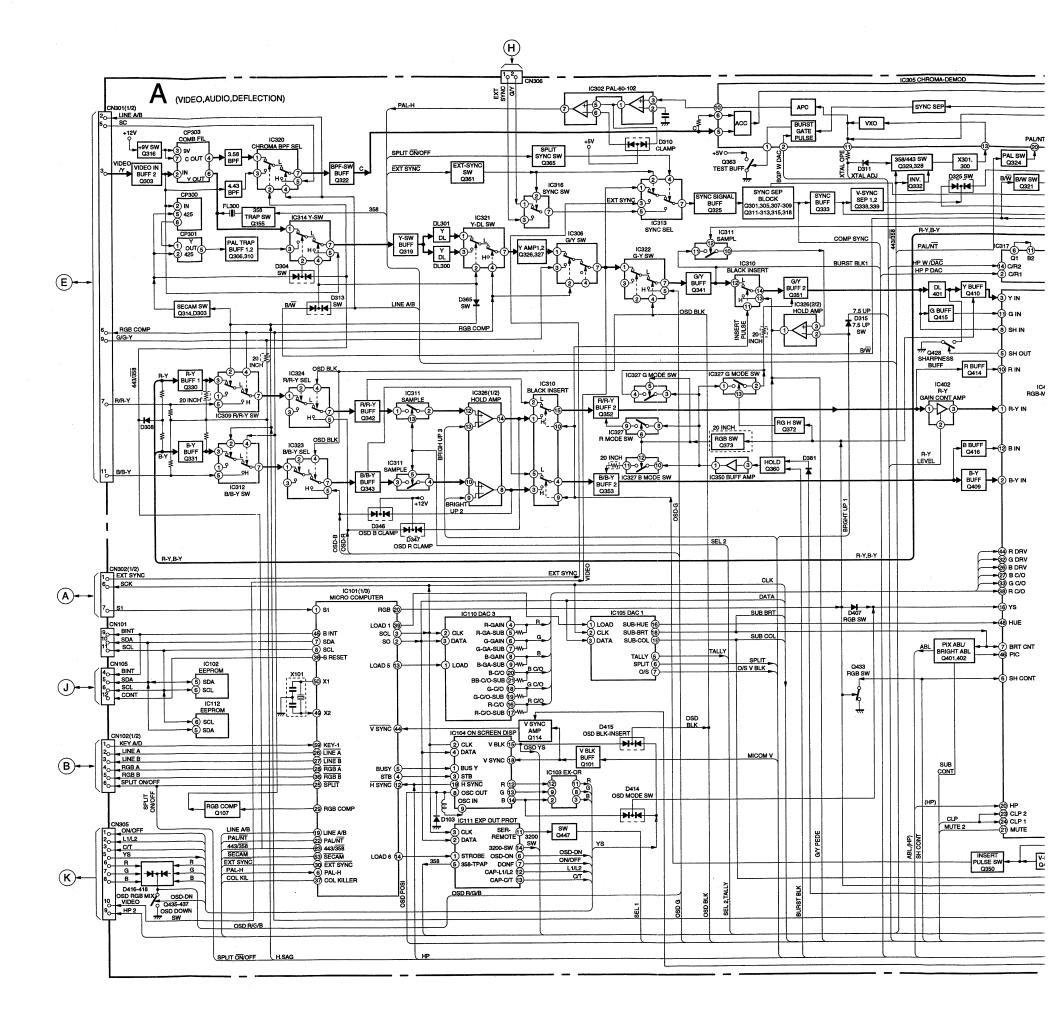


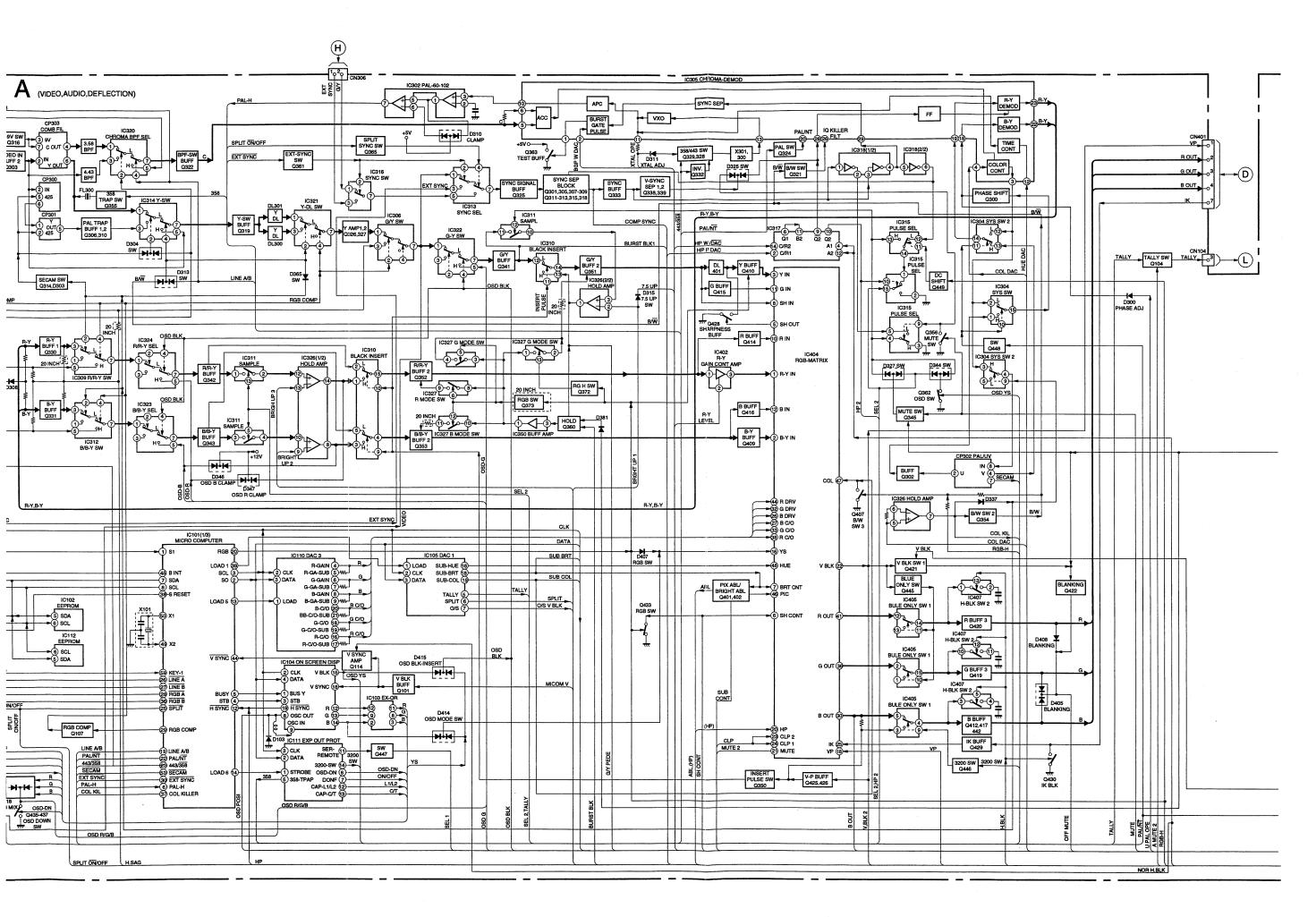


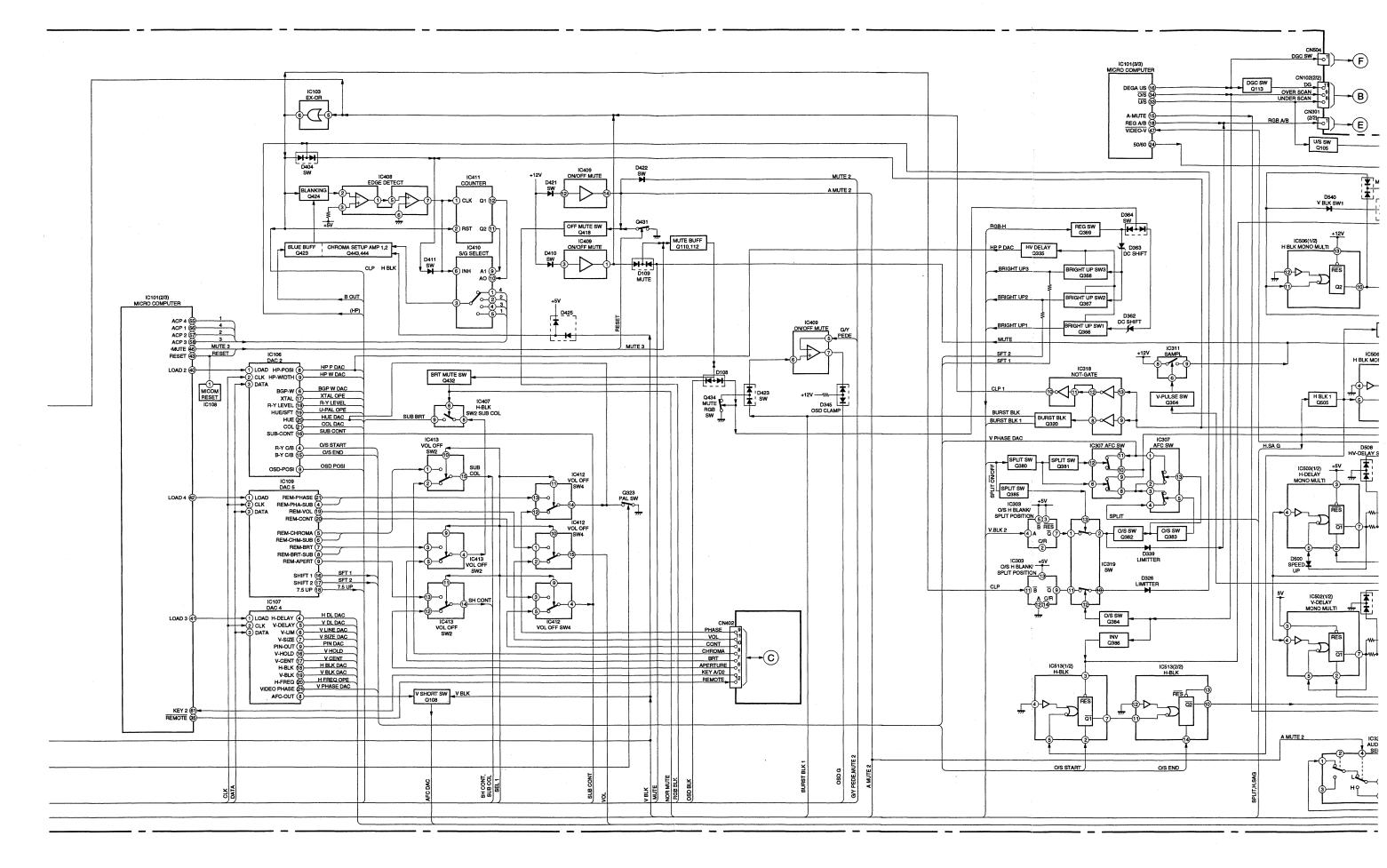


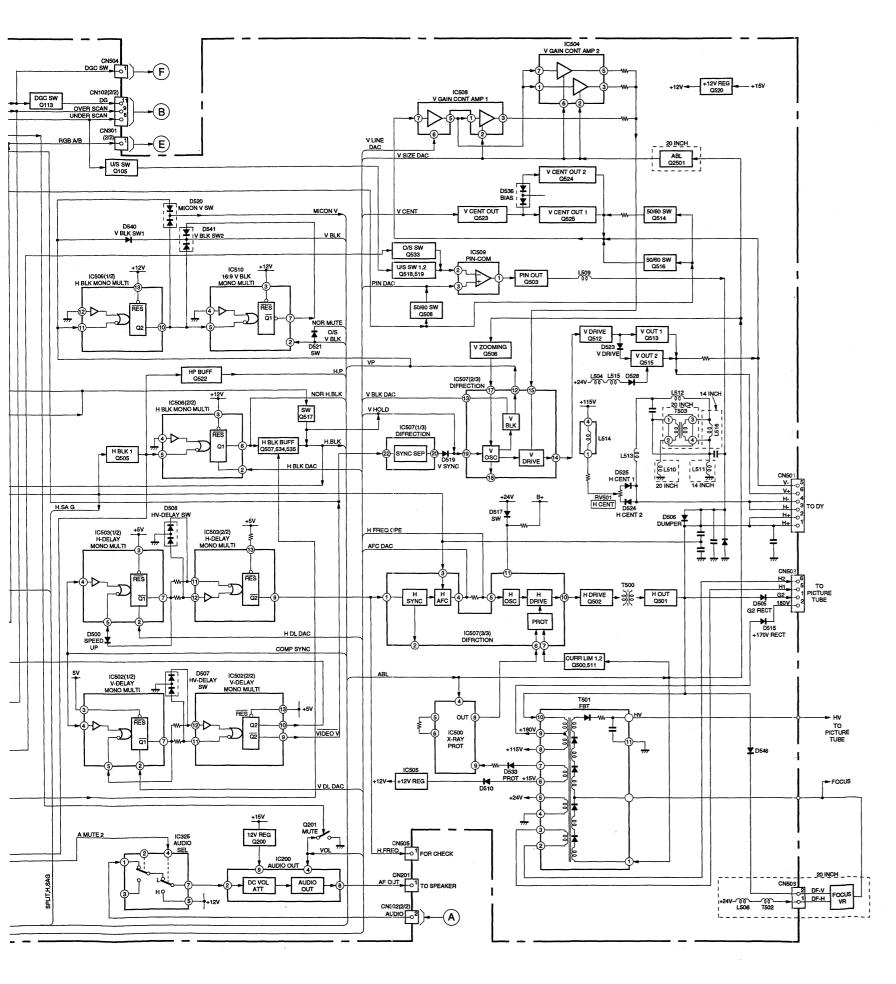
## U/C MODEL ONLY

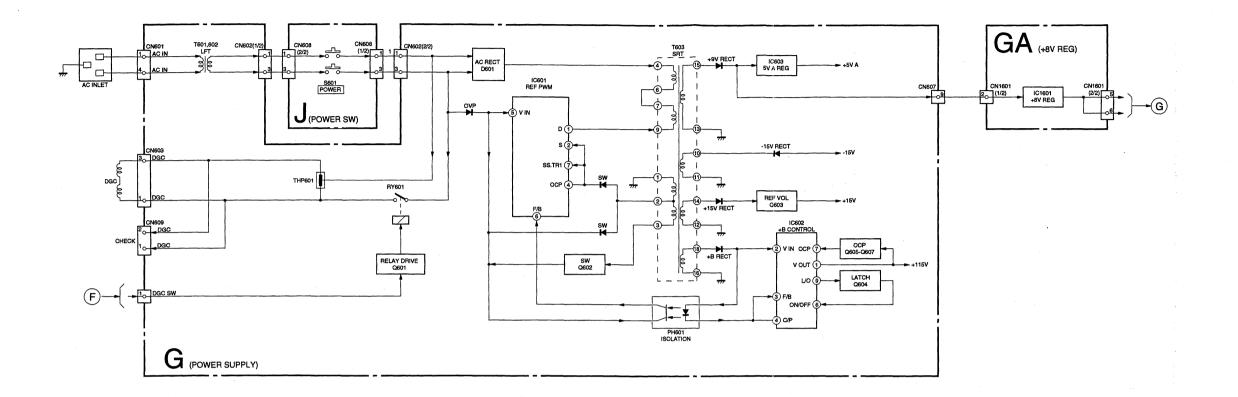








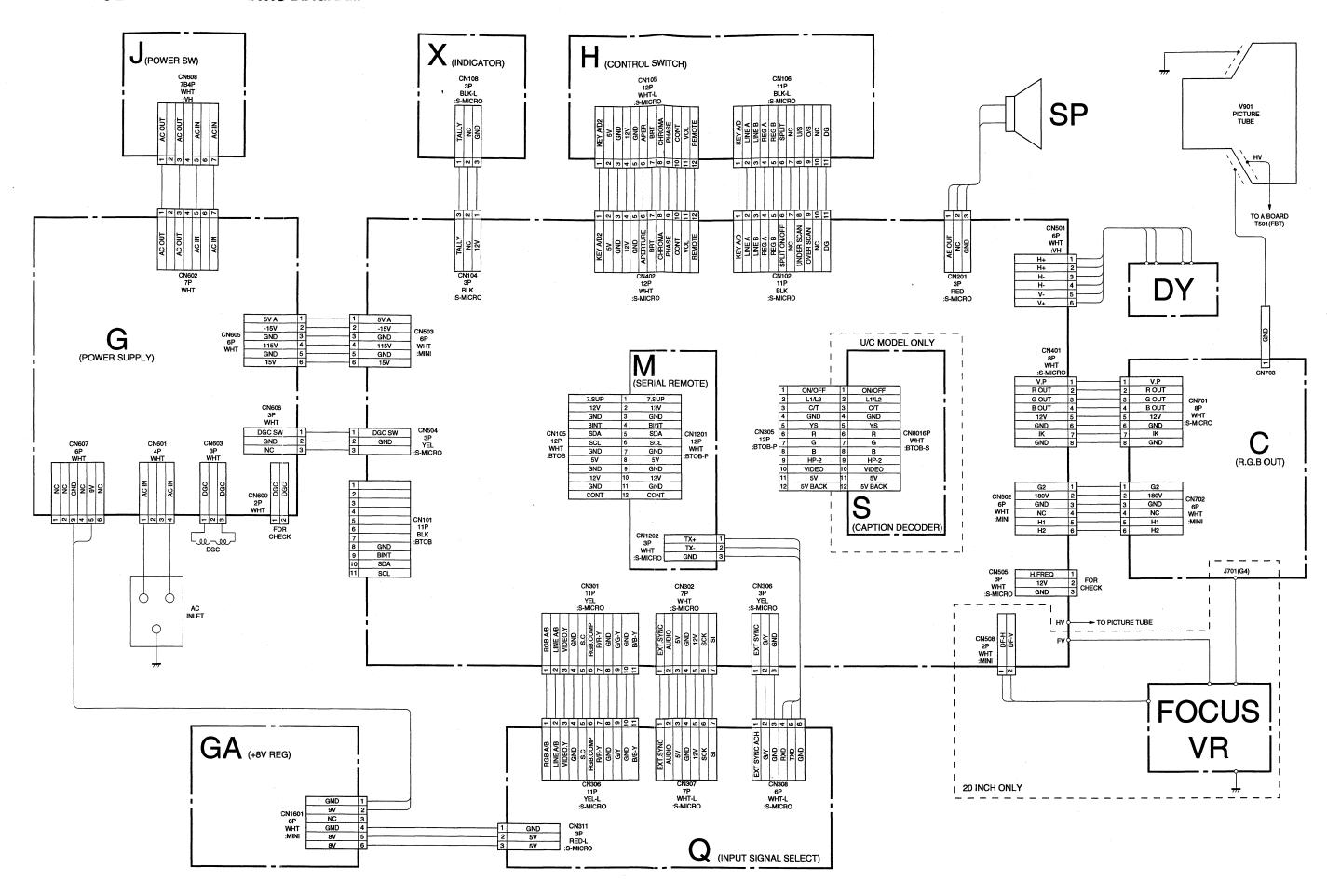




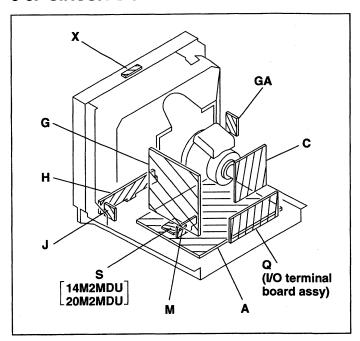
(PO)

SERVICE OF THE PROPERTY OF THE PROPERTY

## 6-2. FRAME SCHEMATIC DIAGRAM



#### 6-3. CIRCUIT BOARDS LOCATION



## 6-4. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

#### Note:

- All capacitors are in  $\mu F$  unless otherwise noted. pF:  $\mu \mu F$
- Capacitors without voltage indication are all 50V.
- All resistors are in ohms, 1/4W in resistance, 1/10W in chip resistance.

 $k\Omega = 1000\Omega$ ,  $M\Omega = 1000k\Omega$ 

• : nonflammable resistor.

: fusible resistor.

: internal component.

• panel designation and adjustment for repair.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- # marked in these schematic diagrams signifies not mounted.
- The components identified by 

  in this basic schematic diagram
  have been carefully factory-selected for each set in order to satisfy
  regulations regarding X-ray radiation.
- Should replacement be required, replace only with the value originally used.

(Refer to R1536 adjustment on Page 4-1)

 When replacing the part in below table, be sure to perform the related adjustment.

Part replaced (☑)	Adjustment (►)
C512, C513, C523, C549, C592, D501, D533, IC500, IC507, Q500, Q511, R506, R508, R515, R516, R517, R518, R519, R551, R1536, R1537, R1560 (A BOARD)	R1536 (HOLD-DOWN)

- Voltage value is the reference value between it and the earth, when color bar signal is received from color bar generator (digital multimeter used: 10M ohms/V DC).
- Unit of voltage values is V (volt).
- No mark: with PAL color-bar signal sreceived or common voltage.
- For the respective voltage ratings in NTSC 3.58, NTSC 4.43, S-VIDEO, and ANALOG RGB modes, see the table.

• V : B + line, B - line.

(Actual measured value may be different).

- Circled numbers are waveform references.
- 🖒 : Signal Path.

#### Reference information

RESISTOR : RN METAL FILM : RC SOLID

: FPRD NONFRAMMABLE CARBON
: FUSE NONFLAMMABLE FUSIBLE
: RS NONFLAMMABLE METAL OXIDE
: RB NONFLAMMABLE CEMENT
: RW NONFLAMMABLE WIREWOUND
: \*\* ADJUSTMENT RESISTOR

COIL : LF-8L MICRO INDUCTOR

CAPACITOR : TA TANTALUM

: PS STYROL

: PP POLYPROPYLENE

: PT MYLAR

: MPS METALIZED POLYESTER

: MPP METALIZED POLYPROPYLENE

: ALB BIPOLAR

: ALT HIGH TEMPERATURE

: ALR HIGH RIPPLE

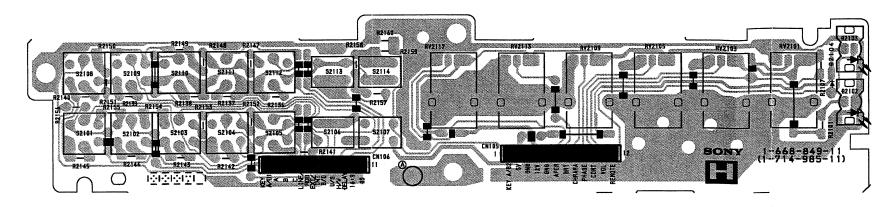
Note: The component identified by shading and mark  $\underline{\mathbb{A}}$  are critical for safety. Replace only with part number specified.

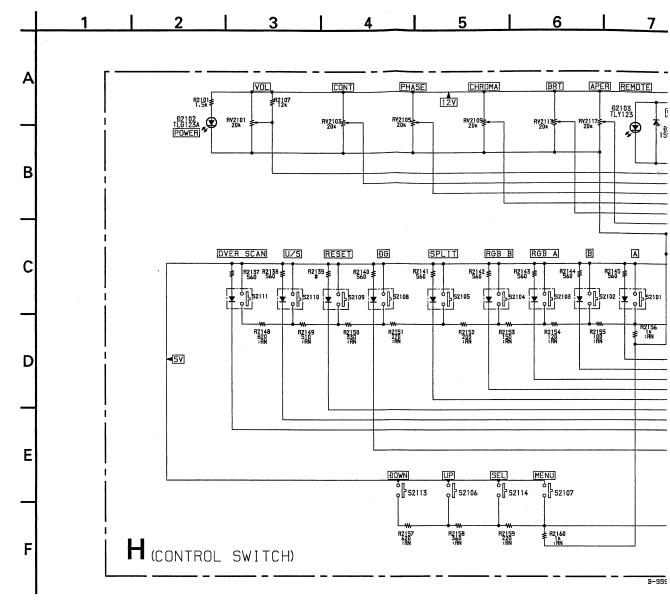
Note: Les composants identifies par une trame et une marque \( \frac{\Lambda}{\text{}} \) sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

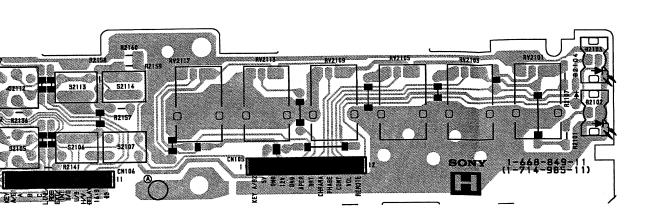
SONY-SP584 / Druck 9 6-15

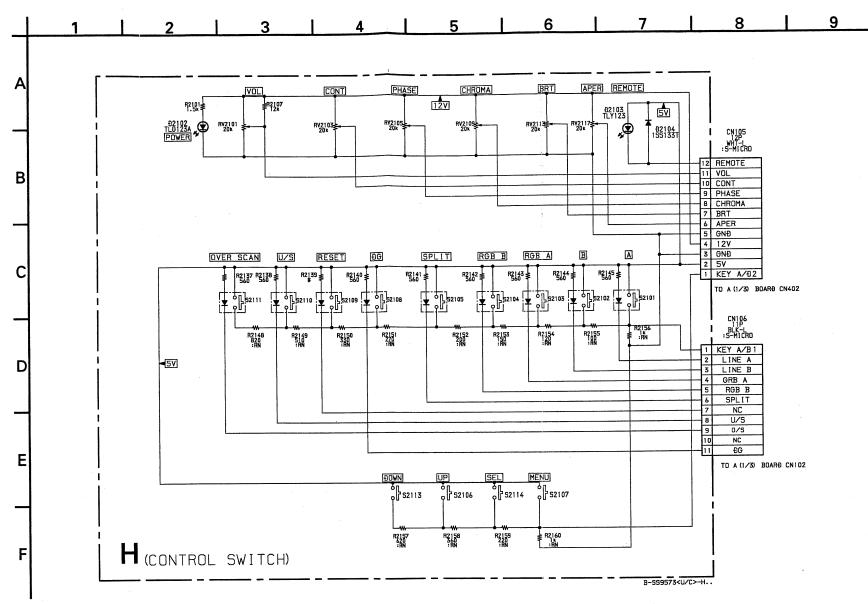


## - H BOARD -









Schematic diagram

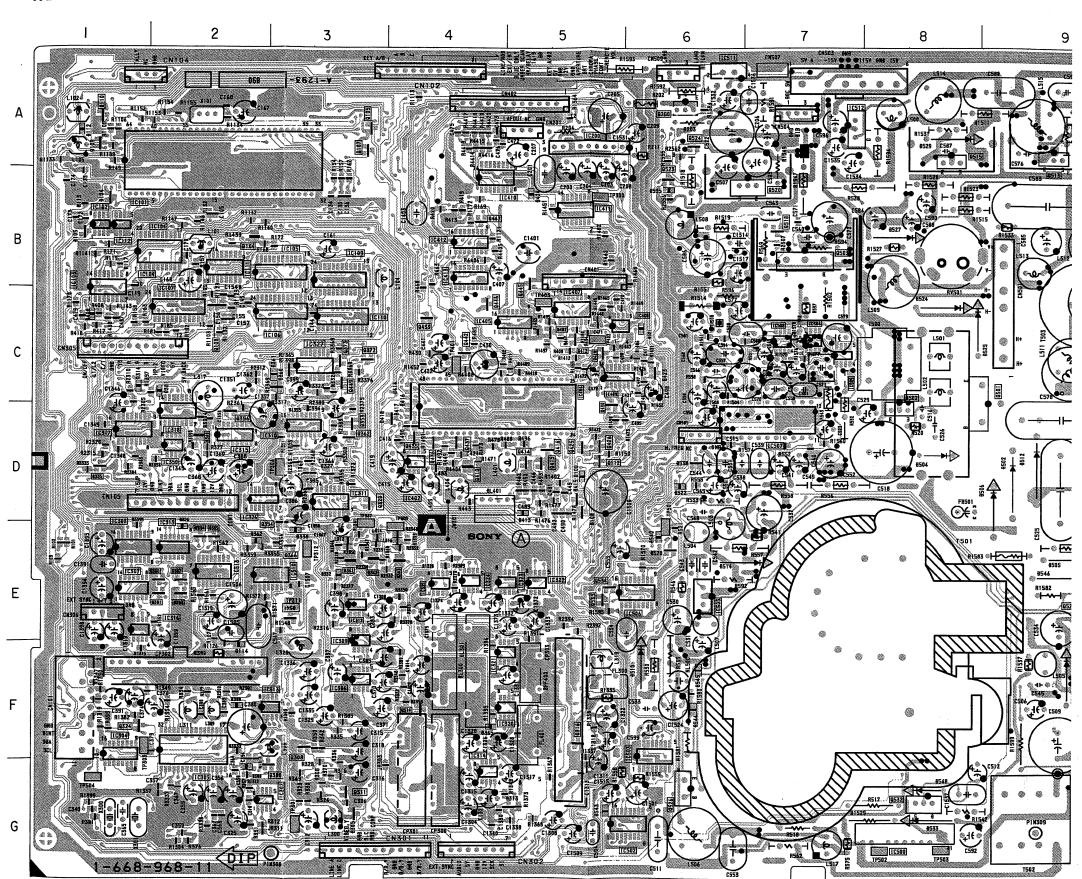
← H board

CHROMA DEMOD, SYSTEM SW, SYNC SELECT, B/B-Y SW, R/R-Y SW, G/Y SW, AUDIO SELECT, HOLD AMP

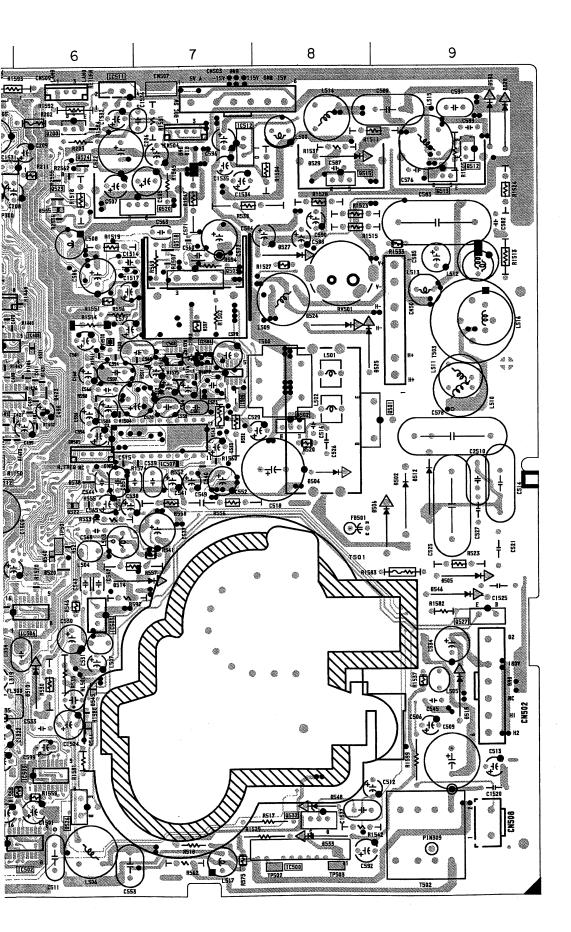
[H/V OUT, DEFLECTIN SYSTEM,] AUDIO OUT

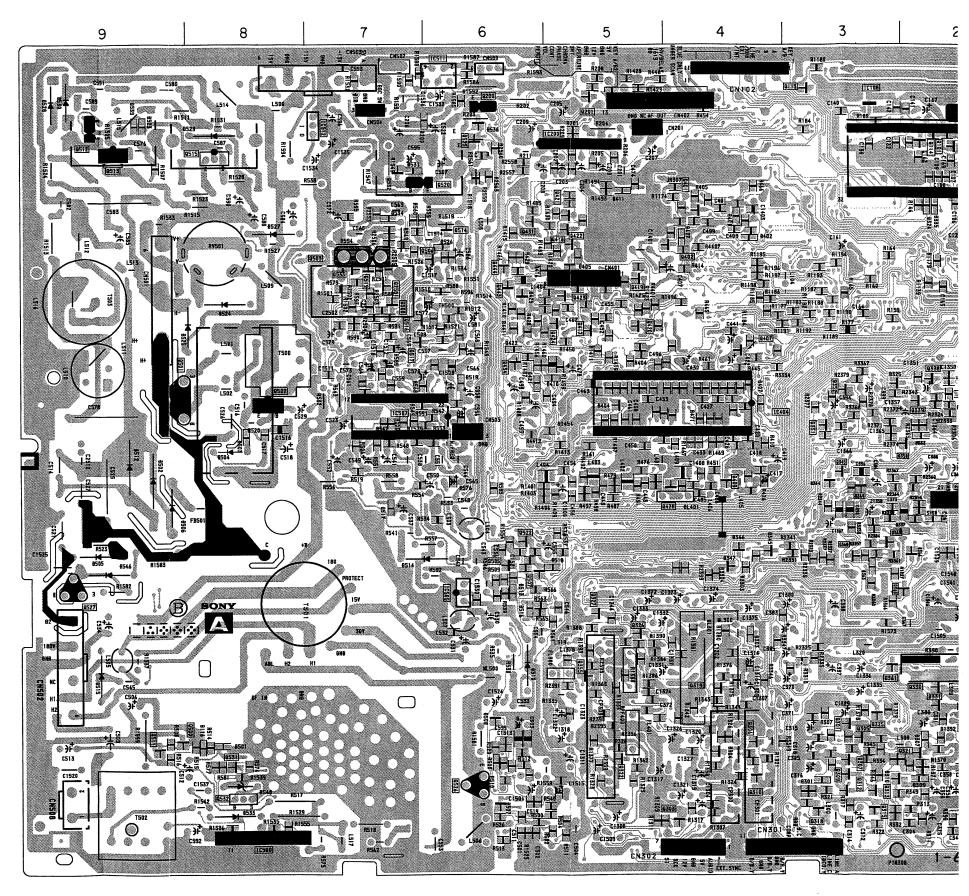
- A BOARD - <A Side>

## A BOARD (A SIDE)



<B Side>

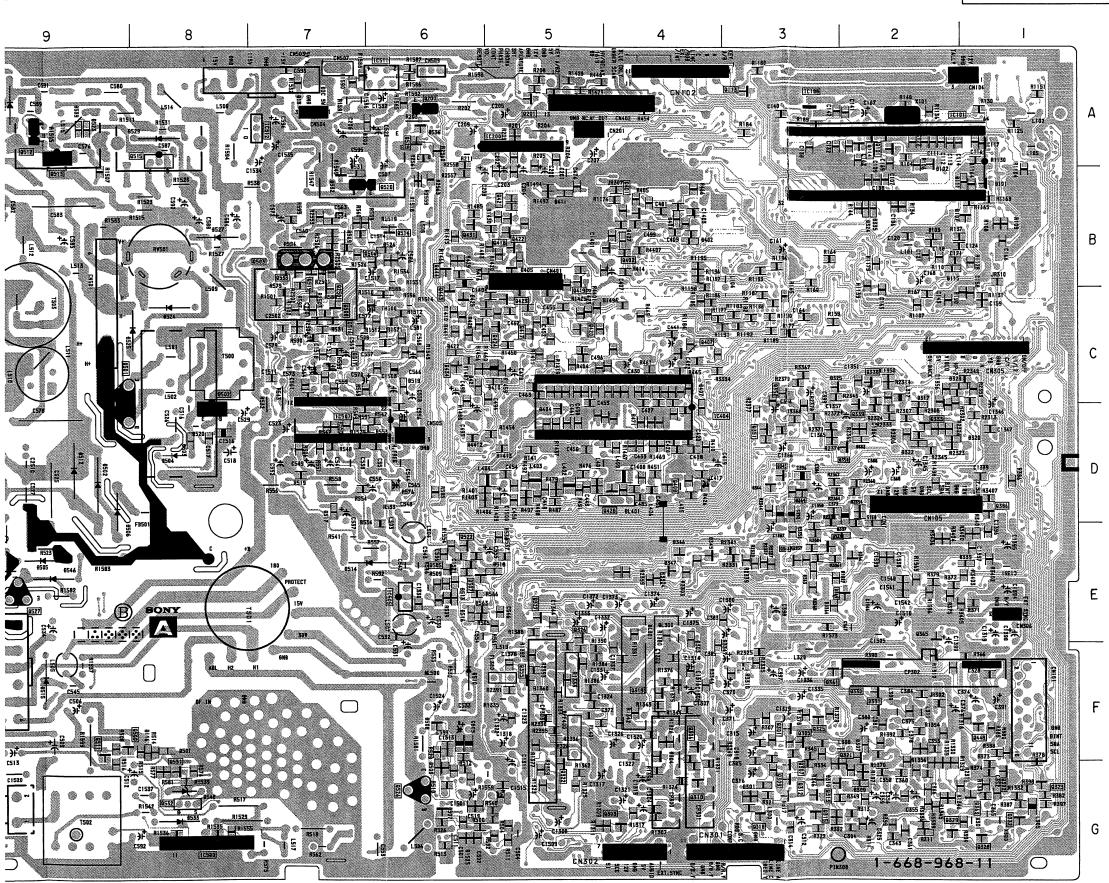






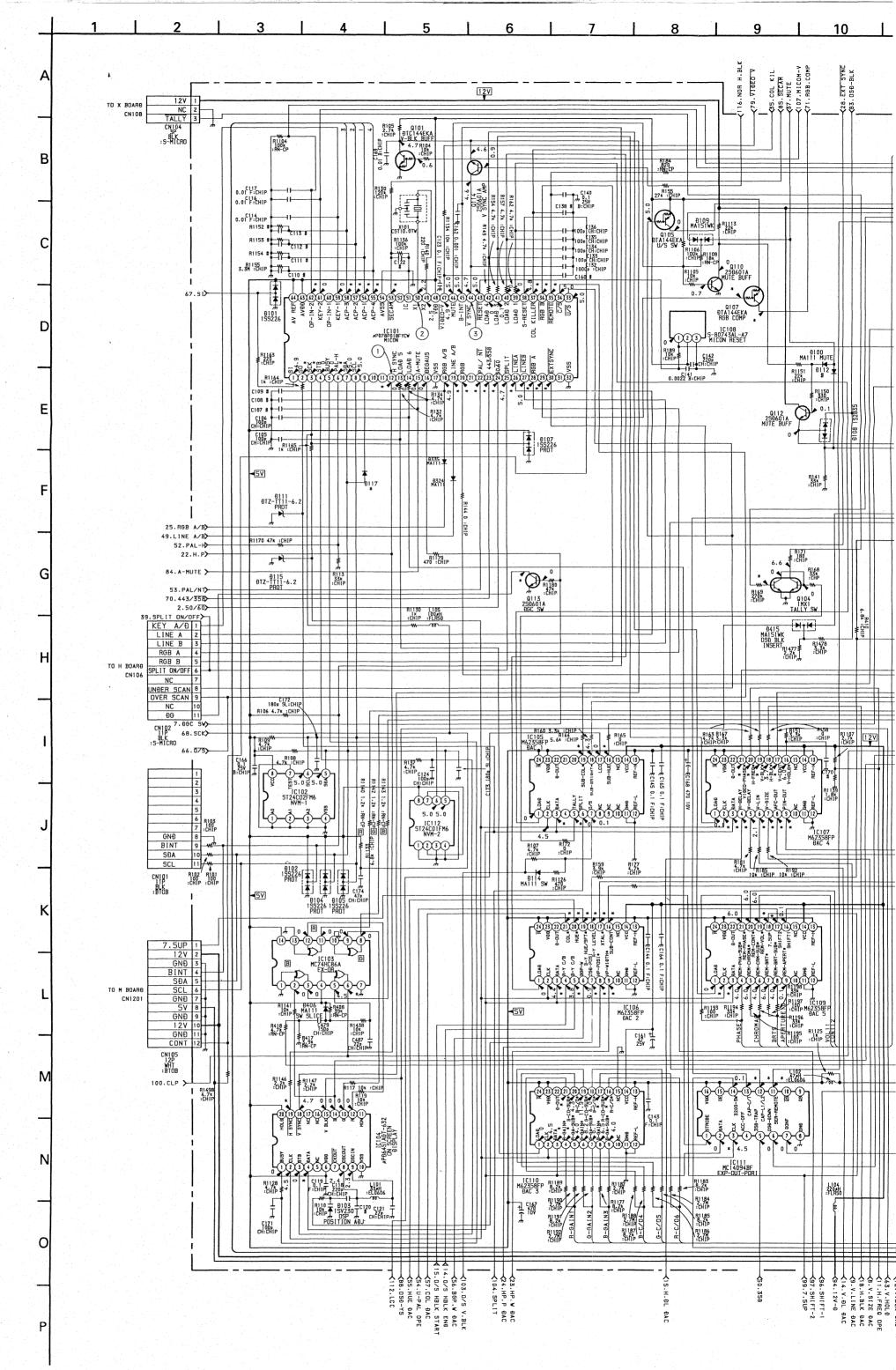
#### NOTE:

The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.



## A BOARD (B SIDE)

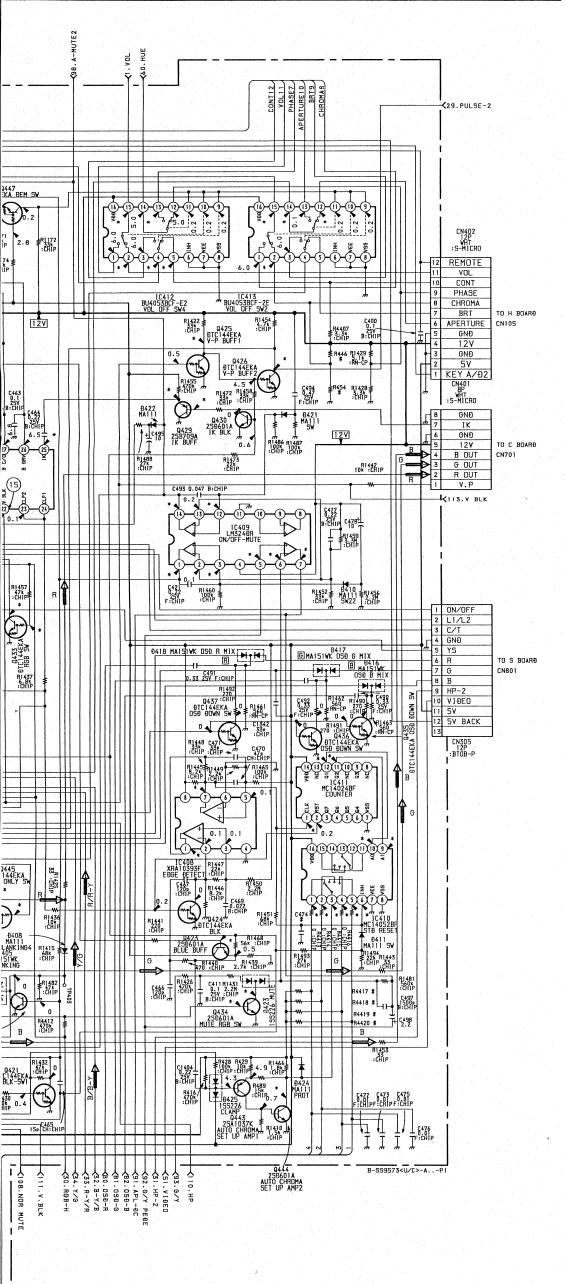
F-1 D407 D-4 F-9 D410 C-5 C-9 D411 B-5 D-8 D421 C-6 B-7 D422 C-6 E-6 D425 C-6 E-6 D427 B-4 E-6 D500 G-6 C-7 D501 F-8 F-9 D502 D-9 A-9 D503 D-8 A-9 D504 D-8 B-6 D505 E-9 C-7 D506 D-9 A-8 D506 D-9 C-7 D507 G-6 B-7 D510 F-6 B-7 D510 F-6 B-7 D512 D-9 E-6 D513 E-6 D514 E-7 D515 F-9 D516 E-6 D517 D-7 D518 E-5 D519 C-6	F-9 D410 C-5 C-9 D411 B-5 D-8 D421 C-6 B-7 D422 C-6 E-6 D425 C-6 B-6 D427 B-4 E-6 D500 G-6 C-7 D501 F-8 B-9 D502 D-9 A-9 D503 D-8 B-9 D504 D-8 B-6 D505 E-9 A-8 D506 D-9 C-7 D507 G-6 C-7 D508 F-6 B-7 D510 F-6 B-7 D515 F-9 C-7 D516 E-6 D517 D-7
D517 D-7 E D518 E-5	D517 D-7 D518 E-5 D519 C-6 B-1 D523 A-9 B-2 D524 C-8 B-2 D525 C-9 B-1 D526 B-6 B-1 D527 B-8 B-2 D528 A-9 F-8 D529 A-8 A-6 D530 A-9 G-3 D531 B-7 F-4 D532 B-7 F-4 D533 G-8 F-2 D534 B-7 G-2 D536 A-6
	B-1 D523 A-9 B-2 D524 C-8 B-2 D525 C-9 B-1 D526 B-6 B-1 D527 B-8 B-2 D528 A-9 F-8 D529 A-8 A-6 D530 A-9 G-3 D531 B-7 F-4 D532 B-7 F-4 D533 G-8 F-2 D534 B-7 G-2 D536 A-6



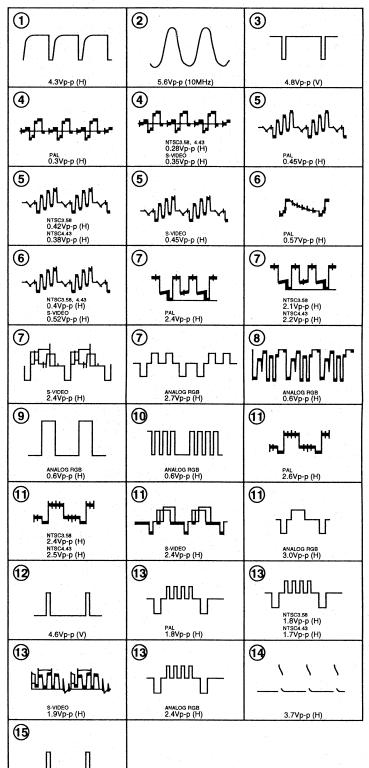




18 | 19 | 20 | 21 | 22 | 23



#### A (1/3) BOARD WAVEFORMS



## A (1/3) BOARD \* MARK LIST

3.6Vp-p (V)

	20INCH MODEL	14INCH MODEL
C443	39p :CHIP	47p CH:CHIP
C446	12p CH:CHIP	6p :CHIP
C448	39p :CHIP	47p CH:CHIP
C454	39p :CHIP	47p CH:CHIP
C456	12p CH:CHIP	6p :CHIP
C1408	39p :CHIP	68p CH:CHIP
L402	82µH :CHIP	100µH :CHIP
L403	82µH :CHIP	100µH :CHIP
L404	82µH :CHIP	100µH :CHIP
L409	82µH :CHIP	68µH :CHIP
R405	1M :CHIP	#
R407	33k :CHIP	15k :CHIP
R413	1M :CHIP	5.1k :RN-CP
R414	0 :CHIP	8.2k :RN-CP
R419	# 1	4.7k :CHIP
R420	#	33k RN:CHIP
R463	3.9k :CHIP	4.7k :CHIP
R491	3.9k :CHIP	3.3k :CHIP
R498	3.9k :CHIP	3.3k :CHIP
R1407	3.9k :CHIP	3.3k :CHIP
R1470	3.3k :CHIP	2.2k ;CHIP
R4405	6.8k :CHIP	5.6k :CHIP

## A (1/3) BOARD \* M

A (1/3)	DOAN	-17 171
	PAL	NTSC 3.58
IC101 @	2.3	2.2
3	4.5	4.5
<u> </u>	3.4	3.5
19	0	0
<b>20</b>	0	0
@	4.9	0
8	5.0	0
20	5.0 0.1	0.1
8	5.0	5.0
<b>3</b>	5.0	5.0
<b>99</b>	5.0	5.0
(S)	4.2	4.6
9	0.3	0.1
83	4.2	4.3
8	4.0	3.6
<b>99</b>	0.5 3.0	1.0 2.6
<u>89</u>	3.6	2.6
8	4.0	4.0
IC103 ⑥	0.2	0.2
IC104 (0)	2.3	2.2
IC105 ③	3.5 2.3	3.5
<u>(S)</u>	0	0.1
16	2.6	2.7
(9)	5.4	5.4
IC106 ③	2.3 5.4	2.2 5.4
0	2.4	2.4
(8)	7.8	7.8
9	5.1	5.1
(19)	0.1 3.1	10.5 2.6
18	2.4	2.1
(9)	6.3	11.9
<b>29</b>	3.6	4.8
(C) (D) (D) (D) (D) (D) (D) (D) (D) (D) (D	0.8 4.6	0.4 4.5
3	2.3	2.2
<u> </u>	2.8	2.8
6	1.5	1.4
8	2.9	2.9
9	2.6	2.6
0	2.6	2.8
199	3.2	5.4
<u> </u>	4.5 6.3	5.0
IC109 ②	6.3 4.6	6.1 4.5
3	2.3	2.2
0	11.9	11.9
(B)	11.9 2.3	0.1 2.2
0	7.2	7.2
<u></u>	5.8	5.8
0	11.9	11.9
20 20	3.7	7.9
IC111 ②	2.3	3.5 2.2
•	0.3	0.3
0	0.2	0.1
(B)	5.0	5.0 5.0
IC402 ②	3.1	2.9
3	0	2.3
<u> </u>	2.9	2.9
IC404 ⑥	3.0	3.0
(0)	4.9 5.6	4.9 5.6
10	5.6	5.6
(1)	0	0
8	3.8	4.0
(28) (30)	7.1	8.0 1.2
89	7.0	8.1
<b>3</b> 8	1.4	1.2
8	7.8	7.7
(B)	6.9 1.2	7.8 1.0
0	7.2	7.2
<b>6</b> 6	7.2	7.2
<b>@</b>	6.6	6.6
IC405 ①	1.6	1.1
3	1.4	0.9
0	1.4	1.0
(5)	1.3	1.0
0	0.5	0.6
l നി	0.5	0.6

0.5 0.6

## A (1/3) BOARD \* MARK VOLTAGE

3	
4.8Vp-p (V)	
<b>⑤</b>	
~\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
РАL 0.45Vp-р (Н)	
6	
J~~~J	
PAL 0.57Vp-p (H)	
7	
NTSC3.58	
NTSC3.58 2.1Vp-p (H) NTSC4.43 2.2Vp-p (H)	
8	
עייע עטיע טייע אוייע	
ANALOG RGB O.6VD-p (H)	
analog rgb 0.6Vp-p (H)	
analog rgb 0.6Vp-p (H)	
ANALOG REB 0.6Vp-p (H)	
ANALOG REB 0.6Vp-p (H)	
ANALOG RGB 0.6Vp-p (H)	
ANALOG RGB 0.6Vp-p (H)	
ANALOG RGB 0.6Vp-p (H)	
ANALOG RGB ().6Vp-p (H)  11)  PAL (2.6Vp-p (H)  11)  ANALOG RGB (3.0Vp-p (H)  13)	
ANALOG RGB 0.6Vp-p (H)  11  PAL 2.6Vp-p (H)  ANALOG RGB 3.0Vp-p (H)	
ANALOG RGB 0.6Vp-p (H)  11  PAL 2.6Vp-p (H)  11  ANALOG RGB 3.0Vp-p (H)  13	
ANALOG RGB ().6Vp-p (H)  11)  PAL (2.6Vp-p (H)  11)  ANALOG RGB (3.0Vp-p (H)  13)	
ANALOG RGB ().6Vp-p (H)  11  PAL (2.6Vp-p (H))  ANALOG RGB ().0Vp-p (H)  13  NTSC3.59 (1.8Vp-p (H))  NTSC4.51	
ANALOG RGB 0.6Vp-p (H)  11  PAL 2.6Vp-p (H)  13  NTSC3.59 (H)  NTSC4.43 (1.7Vp-p (H)	
ANALOG RGB 0.6Vp-p (H)  11  PAL 2.6Vp-p (H)  13  NTSC3.59 (H)  NTSC4.43 (1.7Vp-p (H)	
ANALOG RGB 0.6Vp-p (H)  11  PAL 2.6Vp-p (H)  13  NTSC3.59 (H)  NTSC4.43 (1.7Vp-p (H)	
ANALOG RGB 0.6Vp-p (H)  11  PAL 2.6Vp-p (H)  ANALOG RGB 3.0Vp-p (H)  13  ANALOG RGB 3.0Vp-p (H)  1.7Vp-p (H)  14	

3

~M~

	DAI	NTSC	NTSC	e vince	ANALOG
	PAL	3.58	4.43	S-VIDEO	RGB
IC101 ②	2.3 4.5	2.2 4.5	2.2 4.4	2.0 4.4	2.3 4.5
(6)	4.1	0	0.1	0	0
13	3.4	3.5	3.5	3.1	3.5
(19)	0	0	0	4.8	Ō
<b>20</b>	0	0	0	0	4.9
8	4.9	0	0	0	0
8	5.0	0	5.0	0	0
<b>89</b>	5.0	0	0	0	0
<u>@</u>	0.1 5.0	0.1 5.0	0.1 5.0	4.9	0.1 5.0
<b>8</b>	5.0	5.0	5.0	4.9	0.1
39	5.0	5.0	5.0	5.0	0.1
36	4.2	4.6	5.0	3.9	3.9
<b>3</b>	4.0	4.6	5.0	3.6	3.7
9	0.3	0.1	0.7	0.1	0.1
(S) (S)	4.2 4.0	4.3	4.2 3.7	3.9	4.3
69	0.5	3.6 1.0	0.8	3.1	1.9
9	3.0	2.6	2.3	3.8	2.2
9	3.6	2.9	3.2	3.9	4.0
<b>®</b>	4.0	4.0	4.0	2.9	4.0
IC103 📵	0.2	0.2	0.2	0	0
IC104 ④	2.3	2.2	2.2	2.0	2.3
105 (3)	3.5 2.3	3.5 2.2	3.5 2.2	3.1	3.5 2.3
<u>(C) (S)</u>	0	0.1	0	11.8	0
10	2.6	2.7	2.6	2.8	2.6
19	5.4	5.4	5.4	6.6	8.1
IC106 ③	2.3	2.2	2.2	2.1	2.3
<u> </u>	5.4	5.4	5.4	4.1	5.4
⑦ ⑧	2.4	2.4	2.4	0.6	2.4
9	7.8 5.1	7.8 5.1	7.7 5.1	5.5 4.0	7.8 5.1
100	0.1	10.5	10.5	10.9	10.5
0	3.1	2.6	3.1	2.7	2.5
(8)	2.4	2.1	2.2	2.1	3.2
(9)	6.3	11.9	9.0	10.7	3.7
<b>29</b>	3.6	4.8	3.6	4.3	9.5
<u>න</u> IC107 @	0.8 4.6	0.4 4.5	0.3 4.5	4.4	3.1 4.5
3	2.3	2.2	0	2.1	0
Ō	2.8	2.8	2.8	3.3	2.8
<b>®</b>	1.5	1.4	1.4	2.3	1.4
0	2.9	2.9	2.9	2.1	2.9
<u>8</u>	2.6	2.6	2.6	2.9	2.6
<u> </u>	2.9	2.9	2.9	2.6	2.9
19	3.2	5.4	5.4	5.3	5.4
<b>8</b>	4.5	5.0	5.0	3.7	5.0
<b></b>	6.3	6.1	6.1	6.0	6.1
IC109 ②	4.6	4.5	4.5	4.4	4.4
3	2.3	2.2	2.2	2.1	2.3
(f) (8)	11.9	11.9	11.9	11.9 0.1	0.1
IC110 ③	2.3	0.1 2.2	2.2	2.0	11.8 2.2
<u> </u>	7.2	7.2	7.2	8.3	7.2
18	5.8	5.8	5.8	6.2	5.8
0	11.9	11.9	11.9	7.8	11.9
20	0	7.9	7.9	7.8	7.9
<b>@</b>	3.7	3.5	3.5	3.5	3.6
IC111 @	2.3	2.2	2.2	2.0	2.2
<u> </u>	0.3	0.3 0.1	0.3	0.1	0.3
10	0.2	5.0	5.0	0.1	5.0
13	5.0	5.0	5.0	0	5.0
IC402 ②	3.1	2.9	3.0	3.0	3.6
3	0	2.3	0	2.2	2.2
①	2.9	2.9	0	2.9	2.9
IC404 ®	3.0	3.0	3.0	4.5	0
① @	4.9	4.9	4.9	4.7	6.1
(1) (1)	5.6 5.6	5.6 5.6	5.6 5.6	5.6 5.6	5.8 5.8
18	0	0.6	0	0	4.4
8	3.8	4.0	4.2	4.0	3.6
<b>8</b>	7.1	8.0	8.0	7.7	7.9
39	1.4	1.2	1.1	1.2	1.4
8	7.0	8.1	7.8	7.8	7.8
<b>3</b> 8	7.8	1.2	1.1 7.8	1.2	1.5
39	7.8 6.9	7.7 7.8	7.8 7.7	7.6	7.7
<b>(1)</b>	1.2	1.0	1.0	1.2	1.3
•	7.2	7.2	7.2	8.3	7.2
<u>@</u>	7.2	7.2	7.2	6.9	7.0
•	6.6	6.6	6.6	5.5	0
IC405 ①	1.6	1.1	1.3	1.4	1.6
@	1.4	0.9	0	1.2	1.5
③ ④	1.2	0.9 1.0	0	1.1	1.2
<u> </u>	1.3	1.0	0	1.2	1.4
	0.5	0.6	1.0	0.3	0.2
10	0.5				
(1)	0.5	0.6	1.3	0.3	0.2

	PAL	NTSC	NTSC	S-VIDEO	ANALOG
		3.58	4.43		RGB
IC405 (3)	1.4	0.9	1.3	1.3	1.4
<b>®</b>	1.2	0.8	1.2	1.2	1.3
(1)	1.4	1.0	1.3	1.2	1.5
IC407 ①	1.2	0.9	1.2	1.2	1.3
2	0.4	0.5	0.3	0.4	0.5
				<u> </u>	
3	1.4	1.0	1.3	1.2	1.4
• •	0.6	0.7	0.5	0.5	0.7
(5)	2.0	2.0	2.0	2.0	2.0
6	11.7	11.6	11.3	11.7	11.2
(8)	5.5	5.5	5.5	5.4	8.5
				-	
9	5.5	5.5	5.5	5.4	8.4
100	1.4	1.0	1.3	1.2	1.5
0	0.6	0.7	0.6	0.5	0.6
12	2.0	2.0	2.0	2.0	2.0
(13)	2.0	2.0	2.0	2.0	2.0
IC408 ①	3.1	2.9	3.1	3.7	3.4
0	4.1	3.9	4.1	4.2	4.1
IC409 ①	0	9.0	9.4	0	7.5
3	0	0.4	0.3	0.3	1.6
(5)	5.9	6.3	0	5.9	5.9
6	5.9	6.3	6.0	5.9	5.9
	<del></del>				
0	5.9	6.3	6.0	5.9	5.9
12	0.1	0.5	1.2	0.1	0
•	0	6.6	6.9	0	10.7
IC410 ①	3.8	4.0	4.0	0	3.9
2	3.0	2.4	3.1	0	4.0
3	1.3	1.4	1.6	2.3	1.5
•	3.5	3.0	3.8	3.9	3.9
(5)	0.6	1.1	1.1	3.1	1.7
6	4.0	4.0	3.9	0	0
9	0	1.9	1.8	2.5	1.4
10	2.0	2.3	2.0	1.8	3.0
IC411 ①	4.1	3.9	3.8	4.2	4.1
10	1.8	1.9	1.8	2.5	1.3
12	2.0	2.3	2.1	1.8	3.0
IC412 ②	0.4	0.4	0.4	5.9	0.6
<u> </u>	8.9	8.9	8.9	8.9	8.3
<u>(5)</u>	9.0	9.0	8.9	8.9	8.3
(3)	6.0	6.0	6.0	6.0	Ō
(15)	0.4	0.4	0.4	5.9	0.5
IC413 ②	7.9	8.0	8.0	0	6.9
0	0	5.5	5.5	5.4	0
<u>(5)</u>	5.5	5.5	5.5	5.4	8.6
12	3.1	3.1	31	0	5.1
(0)	3.1	3.1	3.1	6.0	5.1
(13)	7.9	8.0	7.9	6.3	6.9
Q102 B	10.9	10.9	10.9	10.7	10.9
C C	8.1	8.1	8.1	0	8.1
E	11.5	11.5	11.5	11.3	11.5
Q104.1B	-0.2	-0.2	0	0	-0.2
Q107 B	5.0	5.0	5.0	5.0	0.1
С	0	0	0	0	5.0
Q108 C	2.6	2.6	2.6	2.9	2.6
E	2.6	2.6	2.6	2.9	2.6
Q113 C	4.1	4.2	4.2	3.8	4.0
Q401 B	1.1	1.5	1.6	1.2	1.0
С	7.5	6.0	5.2	8.4	10.0
E	1.4	3.2	3.4	3.1	1.0
Q402 B	0.5	0.5	0.5	2.4	0.5
С	9.5	8.1	7.4	10.4	6.9
E	1.4	3.2	3.3	3.2	1.0
Q407 B	0	0.	0	0	0.6
C	6.6	6.6	6.6	5.4	0.0
Q409 B	1.9	1.6	1.6	1.7	1.6
E	2.0	2.2	2.2	2.3	2.2
Q412 B	1.3	1.0	1.3	1.1	1.4
E	2.0	1.7	1.9	1.8	2.0
Q417 B	1.4	1.2	1.2	1.2	1.4
Q418 C	2.1	1.7	1.7	1.7	2.0
Q419 B	1.4	1.2	1.1	1.2	1.5
E	2.0	1.7	1.7	1.8	2.0
Q420 B	1.2	1.0	1.0	1.2	1.3
E	1.8	1.6	1.6	1.8	1.9
Q422 C	2.1	1.7	1.7	1.8	2.0
Q423 B	0.5	0.4	0.4	0.4	0.2
Q425 C	4.5	4.5	4.5	4.7	4.5
Q426 C	0.8	0.7	0.7	0.7	0
Q429 B	0.1	0.4	0.4	0.1	
					0.1
E	0	-1.2	-1.2	0.4	0.4
Q432 B	-0.3	-3.4	-2.7	-0.1	-3.9
С	11.9	11.8	11.8	12.0	11.6
Q433 B	0	0	0	0	2.7
С	3.0	3.0	3.0	4.5	0
Q434 B	-0.1	0	0	-0.1	0.4
С	3.6	4.5	4.8	2.9	0
Q441 G	-1.1	1.7	-4.8	0	-0.7
	2.0	-8.1	1.9	1.8	2.0
	2.0				
D		1.6	1.9	1.8	2.0
D S	2.0			,	0.4
D	2.0 1.3	1.1	1.1	1.1	2.1
D S			1.1 0.7	0.7	
D S Q442 B E	1.3 0.9	1.1 0.7	0.7	0.7	1.5
D S Q442 B	1.3	1.1			

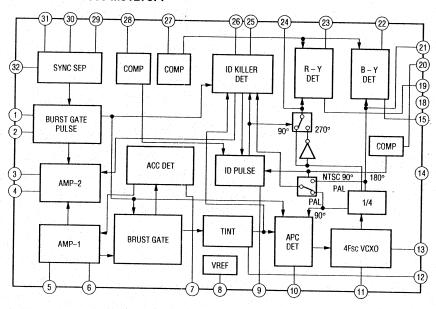
DEL
100
. 1.
1, 1,
N. 18. 1

#### ARK VOLTAGE

RK V	OLTAG	Ε
NTSC	S-VIDEO	ANALOG
4.43		RGB
2.2	2.0	2.3
4.4	4.4	4.5
0.1	0	0
3.5	3.1	3.5
0	4.8 0	0
0	0	4.9
		0
5.0	0	0
0	0	0
0.1	4.9	0.1
5.0	0	5.0
5.0	4.9 5.0	0.1
5.0	3.9	0.1 3.9
5.0		3.9
5.0 0.7	3.6 0.1	0.1
4.2	4.2	4.3
3.7	3.9	4.0
0.8	3.1	1.9
2.3	3.8	2.2
3.2	3.9	4.0
4.0	2.9	4.0
0.2	0	0
2.2	2.0	2.3
3.5	3.1	3.5
2.2	0	2.3
0	11.8	0
2.6	2.8	2.6
5.4	6.6	8.1
2.2	2.1	2.3
5.4	4.1	5.4
2.4	0.6	2.4
7.7	5.5	7.8
5.1	4.0	5.1
10.5	10.9	10.5
3.1	2.7	2.5
2.2	2.1	3.2
9.0	10.7	3.7
3.6	4.3	9.5
0.3	2.4	3.1
4.5	4.4	4.5
0	2.1	0
2.8	3.3	2.8
1.4	2.3	1.4
2.9	2.1	2.9
2.6	2.9	2.6
2.9	2.6	2.9
2.8	2.8	2.8
5.4	5.3	5.4
5.0	3.7	5.0
6.1	6.0	6.1
4.5	4.4	4.4
2.2	2.1	2.3
11.9	11.9	0.1
0	0.1	11.8
2.2	2.0	2.2
7.2	8.3	7.2
5.8	6.2	5.8
11.9	7.8	11.9
7.9	7.8	7.9
3.5	3.5	3.6
2.2	2.0	2.2
0.3	0	0.3
0.1	0.1	0.1
5.0	0	5.0
5.0	0	5.0
3.0	3.0	3.6
0	2.2	2.2
0	2.9	2.9
3.0	4.5	0
4.9	4.7	6.1
5.6	5.6	5.8
5.6	5.6	5.8
0	0	4.4
4.2	4.0	3.6
8.0	7.7	7.9
1.1	1.2	1.4
7.8	7.8	7.8
1.1	1.2	1.5
7.8	8.0	7.7
7.7	7.6	7.6
1.0	1.2	1.3
7.2	8.3	7.2
7.2	6.9	7.0
6.6	5.5	0
1.3	1.4	1.6
0	1.2	1.5
0	1.1	1.2
0	1.2	1.4
0	1.2	1.4
1.0	0.3	0.2
1.3	0.3	0.2

10 105 @		NITCO	NITOO		ANIALO
10 105 (2)	PAL	NTSC 3.58	NTSC 4.43	S-VIDEO	ANALO RGB
IC405 (3)	1.4	0.9	1.3	1.3	1.4
0	1.2	0.8	1.2	1.2	1.3
(6)	1.4	1.0	1.3	1.2	1.5
IC407 ①	1.2	0.9	1.2	1.2	1.3
2	0.4	0.5	0.3	0.4	0.5
3	1.4	1.0	1.3	1.2	1.4
• •	0.6	0.7	0.5	0.5	0.7
(5)	2.0	2.0	2.0	2.0	2.0
6	11.7	11.6	11.3	11.7	11.2
8	5.5	5.5	5.5	5.4	8.5
9	5.5	5.5	5.5	5.4	8.4
10	1.4	1.0	1.3	1.2	1.5
0	0.6	0.7	0.6	0.5	0.6
13	2.0	2.0	2.0	2.0	2.0
(3)	2.0	2.0	2.0	2.0	2.0
IC408 ①	3.1	2.9	3.1	3.7	3.4
0	4.1	3.9	4.1	4.2	4.1
IC409 ①	0	9.0	9.4	0	7.5
3	0	0.4	0.3	0.3	1.6
<u> </u>	5.9	6.3	0	5.9	5.9
6	5.9	6.3	6.0	5.9	5.9
<u> </u>	5.9	6.3	6.0	5.9	5.9
13	0.1	0.5	1.2		0
				0.1	
(0) IC410 (1)	0	6.6	6.9	0	10.7
	3.8	4.0	4.0	0	3.9
2	3.0	2.4	3.1	0	4.0
3	1.3	1.4	1.6	2.3	1.5
•	3.5	3.0	3.8	3.9	3.9
(5)	0.6	1.1	1.1	3.1	1.7
<b>®</b>	4.0	4.0	3.9	0	0 .
9	0	1.9	1.8	2.5	1.4
100	2.0	2.3	2.0	1.8	3.0
IC411 ①	4.1	3.9	3.8	4.2	4.1
10	1.8	1.9	1.8	2.5	1.3
12	2.0	2.3	2.1	1.8	3.0
IC412 ②	0.4	0.4	0.4	5.9	0.6
•	8.9	8.9	8.9	8.9	8.3
⑤	9.0	9.0	8.9	8.9	8.3
(13)	6.0	6.0	6.0	6.0	0
(15)	0.4	0.4	0.4	5.9	0.5
IC413 ②	7.9	8.0	8.0	0	6.9
0	0	5.5	5.5	5.4	0
<u>(5)</u>	5.5	5.5	5.5	5.4	8.6
<u>0</u>	3.1	3.1	31	0	5.1
0	3.1	3.1	3.1	6.0	5.1
(6)	7.9	8.0	7.9	6.3	6.9
Q102 B	10.9	10.9	10.9	10.7	10.9
C	8.1	8.1	8.1	0	8.1
E	11.5	11.5	11.5	11.3	11.5
Q104.1B	-0.2	-0.2	0	0	-0.2
Q104.1B	5.0	5.0	5.0	5.0	0.1
C	0	0	0	0	5.0
Q108 C	2.6	2.6	2.6	2.9	2.6
E	2.6	2.6	2.6	2.9	2.6
Q113 C	4.1	4.2	4.2	3.8	4.0
Q401 B	1.1	1.5	1.6	1.2	1.0
~ 1			5.2		
С	7.5	6.0		8.4	10.0
E	7.5 1.4	3.2	3.4	8.4 3.1	10.0 1.0
					10.0
E	1.4	3.2	3.4	3.1	10.0 1.0
E Q402 B	1.4 0.5	3.2 0.5	3.4 0.5	3.1 2.4	10.0 1.0 0.5
Q402 B C	1.4 0.5 9.5	3.2 0.5 8.1	3.4 0.5 7.4	3.1 2.4 10.4	10.0 1.0 0.5 6.9
Q402 B C C E	1.4 0.5 9.5 1.4	3.2 0.5 8.1 3.2	3.4 0.5 7.4 3.3	3.1 2.4 10.4 3.2	10.0 1.0 0.5 6.9 1.0
Q402 B C C E Q407 B	1.4 0.5 9.5 1.4 0	3.2 0.5 8.1 3.2 0	3.4 0.5 7.4 3.3 0	3.1 2.4 10.4 3.2 0	10.0 1.0 0.5 6.9 1.0 0.6
Q402 B C C E Q407 B C	1.4 0.5 9.5 1.4 0 6.6	3.2 0.5 8.1 3.2 0 6.6	3.4 0.5 7.4 3.3 0 6.6	3.1 2.4 10.4 3.2 0 5.4	10.0 1.0 0.5 6.9 1.0 0.6
Q402 B C C E Q407 B C Q409 B	1.4 0.5 9.5 1.4 0 6.6 1.9	3.2 0.5 8.1 3.2 0 6.6 1.6 2.2	3.4 0.5 7.4 3.3 0 6.6 1.6	3.1 2.4 10.4 3.2 0 5.4 1.7	10.0 1.0 0.5 6.9 1.0 0.6 0
Q402 B C E Q407 B C Q409 B E	1.4 0.5 9.5 1.4 0 6.6 1.9 2.0	3.2 0.5 8.1 3.2 0 6.6 1.6 2.2	3.4 0.5 7.4 3.3 0 6.6 1.6 2.2 1.3	3.1 2.4 10.4 3.2 0 5.4 1.7 2.3 1.1	10.0 1.0 0.5 6.9 1.0 0.6 0 1.6 2.2
Q402 B C C E Q407 B C Q409 B E Q412 B E	1.4 0.5 9.5 1.4 0 6.6 1.9 2.0 1.3	3.2 0.5 8.1 3.2 0 6.6 1.6 2.2 1.0 1.7	3.4 0.5 7.4 3.3 0 6.6 1.6 2.2 1.3	3.1 2.4 10.4 3.2 0 5.4 1.7 2.3 1.1	10.0 1.0 0.5 6.9 1.0 0.6 0 1.6 2.2 1.4
Q402 B C E Q407 B C Q409 B E Q412 B C Q417 B	1.4 0.5 9.5 1.4 0 6.6 1.9 2.0 1.3 2.0 1.4	3.2 0.5 8.1 3.2 0 6.6 1.6 2.2 1.0 1.7	3.4 0.5 7.4 3.3 0 6.6 1.6 2.2 1.3 1.9	3.1 2.4 10.4 3.2 0 5.4 1.7 2.3 1.1 1.8	10.0 1.0 0.5 6.9 1.0 0.6 0 1.6 2.2 1.4 2.0
Q402 B C E Q407 B C Q409 B E Q412 B C Q417 B Q418 C	1.4 0.5 9.5 1.4 0 6.6 1.9 2.0 1.3 2.0 1.4 2.1	3.2 0.5 8.1 3.2 0 6.6 1.6 2.2 1.0 1.7 1.2	3.4 0.5 7.4 3.3 0 6.6 1.6 2.2 1.3 1.9 1.2	3.1 2.4 10.4 3.2 0 5.4 1.7 2.3 1.1 1.8 1.2	10.0 1.0 0.5 6.9 1.0 0.6 0 1.6 2.2 1.4 2.0 1.4
Q402 B C Q407 B C Q409 B E Q412 B E Q417 B Q418 C Q419 B	1.4 0.5 9.5 1.4 0 6.6 1.9 2.0 1.3 2.0 1.4 2.1	3.2 0.5 8.1 3.2 0 6.6 1.6 2.2 1.0 1.7 1.2	3.4 0.5 7.4 3.3 0 6.6 1.6 2.2 1.3 1.9 1.2	3.1 2.4 10.4 3.2 0 5.4 1.7 2.3 1.1 1.8 1.2	10.0 1.0 0.5 6.9 1.0 0.6 0 1.6 2.2 1.4 2.0 1.4 2.0
C   C   C   C   C   C   C   C   C   C	1.4 0.5 9.5 1.4 0 6.6 1.9 2.0 1.3 2.0 1.4 2.1 1.4 2.0	3.2 0.5 8.1 3.2 0 6.6 1.6 2.2 1.0 1.7 1.2 1.7	3.4 0.5 7.4 3.3 0 6.6 1.6 2.2 1.3 1.9 1.2 1.7 1.1	3.1 2.4 10.4 3.2 0 5.4 1.7 2.3 1.1 1.8 1.2 1.7 1.2	10.0 1.0 0.5 6.9 1.0 0.6 0 1.6 2.2 1.4 2.0 1.4 2.0 1.5 2.0
C   C   C   C   C   C   C   C   C   C	1.4 0.5 9.5 1.4 0 6.6 1.9 2.0 1.3 2.0 1.4 2.1 1.4 2.0 1.2	3.2 0.5 8.1 3.2 0 6.6 1.6 2.2 1.0 1.7 1.2 1.7 1.0	3.4 0.5 7.4 3.3 0 6.6 1.6 2.2 1.3 1.9 1.2 1.7 1.1	3.1 2.4 10.4 3.2 0 5.4 1.7 2.3 1.1 1.8 1.2 1.7 1.2	10.0 1.0 0.5 6.9 1.0 0.6 0 1.6 2.2 1.4 2.0 1.4 2.0 1.5 2.0
C   C   C   C   C   C   C   C   C   C	1.4 0.5 9.5 1.4 0 6.6 1.9 2.0 1.3 2.0 1.4 2.1 1.4 2.0 1.2 1.8	3.2 0.5 8.1 3.2 0 6.6 1.6 2.2 1.0 1.7 1.2 1.7 1.0 1.6	3.4 0.5 7.4 3.3 0 6.6 1.6 2.2 1.3 1.9 1.2 1.7 1.1 1.7	3.1 2.4 10.4 3.2 0 5.4 1.7 2.3 1.1 1.8 1.2 1.7 1.2	10.0 1.0 0.5 6.9 1.0 0.6 0 1.6 2.2 1.4 2.0 1.5 2.0 1.3 1.9
C   C   C   C   C   C   C   C   C   C	1.4 0.5 9.5 1.4 0 6.6 1.9 2.0 1.3 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1	3.2 0.5 8.1 3.2 0 6.6 1.6 2.2 1.0 1.7 1.2 1.7 1.2 1.7 1.0 1.6 1.7	3.4 0.5 7.4 3.3 0 6.6 1.6 2.2 1.3 1.9 1.2 1.7 1.1 1.7 1.0 1.6 1.7	3.1 2.4 10.4 3.2 0 5.4 1.7 2.3 1.1 1.8 1.2 1.7 1.2 1.8 1.2	10.0 1.0 0.5 6.9 1.0 0 1.6 2.2 1.4 2.0 1.4 2.0 1.5 2.0 1.3 1.9 2.0
C	1.4 0.5 9.5 1.4 0 6.6 1.9 2.0 1.3 2.0 1.4 2.1 1.4 2.0 1.8 2.1 0.5	3.2 0.5 8.1 3.2 0 6.6 1.6 2.2 1.0 1.7 1.2 1.7 1.2 1.7 1.0 1.6 1.7 1.0 1.7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	3.4 0.5 7.4 3.3 0 6.6 1.6 2.2 1.3 1.9 1.2 1.7 1.1 1.7 1.0 1.6 1.7 0.4	3.1 2.4 10.4 3.2 0 5.4 1.7 2.3 1.1 1.8 1.2 1.7 1.2 1.8 1.2 1.8 1.9	10.0 1.0 0.5 6.9 1.0 0 1.6 2.2 1.4 2.0 1.4 2.0 1.5 2.0 1.9 2.0 0.0
C   C   C   C   C   C   C   C   C   C	1.4 0.5 9.5 1.4 0 6.6 1.9 2.0 1.3 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5	3.2 0.5 8.1 3.2 0 6.6 1.6 2.2 1.0 1.7 1.2 1.7 1.0 1.6 1.7 1.0 1.7 1.0 1.7 1.0 1.7 1.0 1.7 1.0 1.7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	3.4 0.5 7.4 3.3 0 6.6 1.6 2.2 1.3 1.9 1.2 1.7 1.1 1.7 1.0 1.6 1.7 0.4 4.5	3.1 2.4 10.4 3.2 0 5.4 1.7 2.3 1.1 1.8 1.2 1.8 1.2 1.8 1.9 1.8 0.4	10.0 1.0 0.5 6.9 1.0 0.6 2.2 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5
C   C   C   C   C   C   C   C   C   C	1.4 0.5 9.5 1.4 0 6.6 1.9 2.0 1.3 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.6 0.6 0.6 0.6 0.6 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7	3.2 0.5 8.1 3.2 0 6.6 1.6 2.2 1.0 1.7 1.2 1.7 1.0 1.6 1.7 0.4 4.5 0.7	3.4 0.5 7.4 3.3 0 6.6 1.6 2.2 1.3 1.9 1.2 1.7 1.1 1.7 1.0 1.6 1.7 0.4 4.5 0.7	3.1 2.4 10.4 3.2 0 5.4 1.7 2.3 1.1 1.8 1.2 1.7 1.2 1.8 1.8 0.4 4.7 0.7	10.0 1.0 0.5 6.9 1.0 0.6 0 1.6 2.2 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5
C   C   C   C   C   C   C   C   C   C	1.4 0.5 9.5 1.4 0 6.6 1.9 2.0 1.3 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8 0.1	3.2 0.5 8.1 3.2 0 6.6 1.6 2.2 1.0 1.7 1.2 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4	3.4 0.5 7.4 3.3 0 6.6 1.6 2.2 1.3 1.9 1.2 1.7 1.1 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4	3.1 2.4 10.4 3.2 0 5.4 1.7 2.3 1.1 1.8 1.2 1.7 1.2 1.8 1.2 1.8 0.4 4.7 0.7	10.0 1.0 0.5 6.9 1.0 0.6 0 1.6 2.2 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
C   C   C   C   C   C   C   C   C   C	1.4 0.5 9.5 1.4 0 6.6 1.9 2.0 1.3 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8 0.1	3.2 0.5 8.1 3.2 0 6.6 1.6 2.2 1.0 1.7 1.2 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 -1.2	3.4 0.5 7.4 3.3 0 6.6 1.6 2.2 1.3 1.9 1.2 1.7 1.1 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 -1.2	3.1 2.4 10.4 3.2 0 5.4 1.7 2.3 1.1 1.8 1.2 1.7 1.2 1.8 1.2 1.8 0.4 4.7 0.7 0.1	10.0 1.0 0.5 6.9 1.0 0.6 0 1.6 2.2 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6
C   C   C   C   C   C   C   C   C   C	1.4 0.5 9.5 1.4 0 6.6 1.9 2.0 1.3 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8 0.1	3.2 0.5 8.1 3.2 0 6.6 1.6 2.2 1.0 1.7 1.2 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4	3.4 0.5 7.4 3.3 0 6.6 1.6 2.2 1.3 1.9 1.2 1.7 1.1 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 -1.2 -2.7	3.1 2.4 10.4 3.2 0 5.4 1.7 2.3 1.1 1.8 1.2 1.7 1.2 1.8 1.2 1.8 0.4 4.7 0.7	10.0 1.0 0.5 6.9 1.0 0.6 0 1.6 2.2 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
C   C   C   C   C   C   C   C   C   C	1.4 0.5 9.5 1.4 0 6.6 1.9 2.0 1.3 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8 0.1	3.2 0.5 8.1 3.2 0 6.6 1.6 2.2 1.0 1.7 1.2 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 -1.2	3.4 0.5 7.4 3.3 0 6.6 1.6 2.2 1.3 1.9 1.2 1.7 1.1 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 -1.2	3.1 2.4 10.4 3.2 0 5.4 1.7 2.3 1.1 1.8 1.2 1.7 1.2 1.8 1.2 1.8 0.4 4.7 0.7 0.1	10.0 1.0 0.5 6.9 1.0 0.6 0 1.6 2.2 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6
C   C   C   C   C   C   C   C   C   C	1.4 0.5 9.5 1.4 0 6.6 1.9 2.0 1.3 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8 0.1 0	3.2 0.5 8.1 3.2 0 6.6 1.6 2.2 1.0 1.7 1.2 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 -1.2 -3.4	3.4 0.5 7.4 3.3 0 6.6 1.6 2.2 1.3 1.9 1.2 1.7 1.1 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 -1.2 -2.7	3.1 2.4 10.4 3.2 0 5.4 1.7 2.3 1.1 1.8 1.2 1.7 1.2 1.8 1.2 1.8 1.9 0.4 4.7 0.7 0.1 0.4 -0.1	10.0 1.0 0.5 6.9 1.0 0.6 0 1.6 2.2 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5 0 0.1 0.6
C	1.4 0.5 9.5 1.4 0 6.6 1.9 2.0 1.3 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8 0.1 0.9 0.0 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9	3.2 0.5 8.1 3.2 0 6.6 1.6 2.2 1.0 1.7 1.2 1.7 1.2 1.7 1.0 4.5 0.7 0.4 4.5 0.7 0.4 1.8	3.4 0.5 7.4 3.3 0 6.6 1.6 2.2 1.3 1.9 1.2 1.7 1.1 1.7 1.0 4.5 0.7 0.4 4.5 0.7 1.8	3.1 2.4 10.4 3.2 0 5.4 1.7 2.3 1.1 1.8 1.2 1.7 1.2 1.8 1.2 1.7 0.4 4.7 0.7 0.1	10.0 1.0 0.5 6.9 1.0 0.6 0 1.6 2.2 1.4 2.0 1.5 2.0 1.5 2.0 1.9 2.0 0.2 4.5 0 0.6 1.9 0.6 1.0 0.6 1.0 0.6 1.0 0.6 1.0 0.6 1.0 0.6 1.0 0.6 1.0 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0
C	1.4 0.5 9.5 1.4 0 6.6 1.9 2.0 1.3 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8 0.1 0.9 0.0 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9	3.2 0.5 8.1 3.2 0 6.6 1.6 2.2 1.0 1.7 1.2 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 1.1 1.2 1.7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	3.4 0.5 7.4 3.3 0 6.6 1.6 2.2 1.3 1.9 1.2 1.7 1.1 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 -1.2 -1.3 0.7 0.4 -1.8 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7	3.1 2.4 10.4 3.2 0 5.4 1.7 2.3 1.1 1.8 1.2 1.8 1.2 1.8 0.4 4.7 0.7 0.1 0.4 -0.1 12.0 0	10.0 1.0 0.5 6.9 1.0 0.6 2.2 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5 0 0.1 0.6 2.2 1.4 2.0 1.5 2.0 1.6 2.2 1.7 2.0 1.6 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0
C	1.4 0.5 9.5 1.4 0 6.6 1.9 2.0 1.3 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8 0.1 0 	3.2 0.5 8.1 3.2 0 6.6 1.6 2.2 1.0 1.7 1.2 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 -1.2 -3.4 11.8 0 0.0	3.4 0.5 7.4 3.3 0 6.6 1.6 2.2 1.3 1.9 1.2 1.7 1.1 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 -1.2 -2.7 1.1 0.4 0.7 0.4 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7	3.1 2.4 10.4 3.2 0 5.4 1.7 2.3 1.1 1.8 1.2 1.7 1.2 1.8 1.2 1.8 0.4 4.7 0.7 0.1 0.4 0.4 0.4 0.7 0.1 0.4 0.7	10.0 1.0 0.5 6.9 1.0 0.6 0 1.6 2.2 1.4 2.0 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5 0 0.1 0.4 -3.9 10.4 -3.9 10.4 -3.9 -3
C   C   C   C   C   C   C   C   C   C	1.4 0.5 9.5 1.4 0 6.6 1.9 2.0 1.3 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.1 0 0 0 0 0 0 0 0 0 0 0 0 0	3.2 0.5 8.1 3.2 0 6.6 1.6 2.2 1.0 1.7 1.2 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 -1.2 -3.4 11.8 0 0 0 0 0 0 0 0 0 0 0 0 0	3.4 0.5 7.4 3.3 0 6.6 1.6 2.2 1.3 1.9 1.2 1.7 1.1 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 -1.2 -2.7 11.8 0 0 0 0 0 0 0 0 0 0 0 0 0	3.1 2.4 10.4 3.2 0 5.4 1.7 2.3 1.1 1.8 1.2 1.7 1.2 1.8 1.2 1.8 0.4 4.7 0.7 0.1 0.4 -0.1 12.0 0 4.5 -0.1 2.9	10.0 1.0 0.5 6.9 1.0 0.6 0 1.6 2.2 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5 0 0.1 0.6 0 0.6 0 0 1.6 0 0 0 0 0 0 0 0 0 0 0 0 0
C   C   C   C   C   C   C   C   C   C	1.4 0.5 9.5 1.4 0 6.6 1.9 2.0 1.3 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8 0.1 0 0 0 0 0 0 0 0 0 0 0 0 0	3.2 0.5 8.1 3.2 0 6.6 1.6 2.2 1.0 1.7 1.2 1.7 1.2 1.7 1.0 4.5 0.7 0.4 4.5 0.7 0.4 1.8 0 0 0 0 0 0 0 0 0 0 0 0 0	3.4 0.5 7.4 3.3 0 6.6 1.6 2.2 1.3 1.9 1.2 1.7 1.1 1.7 1.0 4.5 0.7 0.4 4.5 0.4 -1.2 -2.7 11.8 0 3.0 0 0 0 0 0 0 0 0 0 0 0 0 0	3.1 2.4 10.4 3.2 0 5.4 1.7 2.3 1.1 1.8 1.2 1.7 1.2 1.8 1.2 1.7 0.4 4.7 0.7 0.1 0.4 -0.1 12.0 0	10.0 1.0 0.5 6.9 1.0 0.6 0 1.6 2.2 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5 0 0.1 0.4 -3.9 11.6 2.7 0 0.4 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7
C   C   C   C   C   C   C   C   C   C	1.4 0.5 9.5 1.4 0 6.6 1.9 2.0 1.3 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8 0.1 0.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0	3.2 0.5 8.1 3.2 0 6.6 1.6 2.2 1.0 1.7 1.2 1.7 1.2 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 4.5 0.7 0.4 1.8 0.8 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9	3.4 0.5 7.4 3.3 0 6.6 1.6 2.2 1.3 1.9 1.2 1.7 1.1 1.7 1.0 4.5 0.7 0.4 4.5 0.7 1.8 0 3.0 0 4.6 0.7 0.4 1.9 1.9 1.9 1.9 1.1 1.0 1.0 1.0 1.0 1.0 1.0 1.0	3.1 2.4 10.4 3.2 0 5.4 1.7 2.3 1.1 1.8 1.2 1.8 1.2 1.8 1.2 1.8 0.4 4.7 0.7 0.1 12.0 0 4.5 -0.1 12.0 0	10.0 1.0 0.5 6.9 1.0 0.6 0 1.6 2.2 1.4 2.0 1.5 2.0 1.9 2.0 0.2 4.5 0 0.1 11.6 2.7 0 0.4 -3.9 11.6 2.7 0 0.4 0 -0.7
C	1.4 0.5 9.5 1.4 0 6.6 1.9 2.0 1.3 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8 0.1 0 0 0 0 0 0 0 0 0 0 0 0 0	3.2 0.5 8.1 3.2 0 6.6 1.6 2.2 1.0 1.7 1.2 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 -1.2 -3.4 11.8 0 3.0 0 4.5 1.7 -1.8 -1.9	3.4 0.5 7.4 3.3 0 6.6 1.6 2.2 1.3 1.9 1.2 1.7 1.1 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 -1.2 -2.7 11.8 0 3.0 0 4.8 -4.8 1.9 1.9 1.9	3.1 2.4 10.4 3.2 0 5.4 1.7 2.3 1.1 1.8 1.2 1.8 1.2 1.8 1.0 4.7 0.7 0.1 0.4 4.7 0.7 0.1 12.0 0 4.5 -0.1 12.0 0 12.0 0 13.0 14.0 15.0 16.	10.0 1.0 0.5 6.9 1.0 0.6 0 1.6 2.2 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5 0 0.1 0.4 -3.9 11.6 2.7 0 0.4 0 -0.7 2.0 2.0 2.0
C	1.4 0.5 9.5 1.4 0 6.6 1.9 2.0 1.3 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8 0.1 0 -0.3 11.9 0 3.0 -0.1 3.0 -0.1 0 -0.3 1.0 -0.3 1.0 -0.3 1.0 -0.3 -	3.2 0.5 8.1 3.2 0 6.6 1.6 2.2 1.0 1.7 1.2 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 -1.2 -3.4 11.8 0 3.0 0 4.5 1.7 1.7 1.8 1.8 1.9 1.9 1.9 1.9 1.9 1.9 1.9 1.9	3.4 0.5 7.4 3.3 0 6.6 1.6 2.2 1.3 1.9 1.2 1.7 1.1 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 -1.2 -2.7 11.8 0 3.0 0 0 4.5 0 0 0 0 0 0 0 0 0 0 0 0 0	3.1 2.4 10.4 3.2 0 0 5.4 1.7 2.3 1.1 1.8 1.2 1.8 1.2 1.8 0.4 4.7 0.7 0.1 0.4 -0.1 12.9 0 4.5 -0.1 2.9 0 1.8 1.1 1.0 1.0 1.0 1.0 1.0 1.0 1.0	10.0 1.0 0.5 6.9 1.0 0.6 0 1.6 2.2 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5 0 0.1 0.4 -3.9 11.6 2.7 0 0.4 0 -0.7 2.0 2.0 2.1
C	1.4 0.5 9.5 1.4 0 6.6 1.9 2.0 1.3 2.0 1.4 2.1 1.4 2.0 1.2 1.8 2.1 0.5 4.5 0.8 0.1 0 0 0 0 0 0 0 0 0 0 0 0 0	3.2 0.5 8.1 3.2 0 6.6 1.6 2.2 1.0 1.7 1.2 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 -1.2 -3.4 11.8 0 3.0 0 4.5 1.7 -1.8 -1.9	3.4 0.5 7.4 3.3 0 6.6 1.6 2.2 1.3 1.9 1.2 1.7 1.1 1.7 1.0 1.6 1.7 0.4 4.5 0.7 0.4 -1.2 -2.7 11.8 0 3.0 0 4.8 -4.8 1.9 1.9 1.9	3.1 2.4 10.4 3.2 0 5.4 1.7 2.3 1.1 1.8 1.2 1.8 1.2 1.8 1.0 4.7 0.7 0.1 0.4 4.7 0.7 0.1 12.0 0 4.5 -0.1 12.0 0 12.0 0 13.0 14.0 15.0 16.	10.0 1.0 0.5 6.9 1.0 0.6 0 1.6 2.2 1.4 2.0 1.5 2.0 1.3 1.9 2.0 0.2 4.5 0 0.1 0.4 -3.9 11.6 2.7 0 0.4 0 -0.7 2.0 2.0 2.0

#### **A BOARD IC305 M51279FP**



#### A (2/3) BOARD \* MARK VOLTAGE

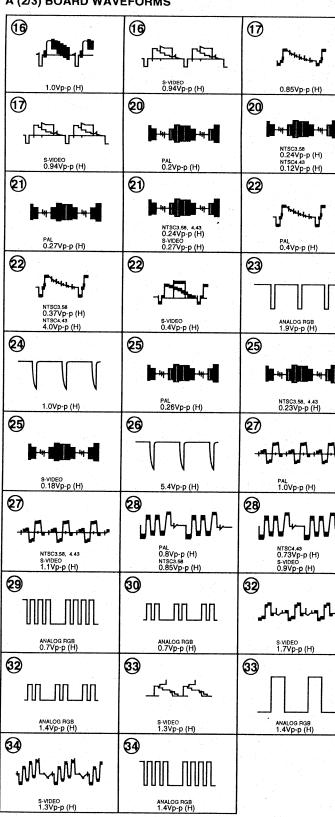
	PAL	NTSC 3.58	NTSC 4.43	S-VIDEO	ANALOG FGB
IC302 ①	2.9	2.9	0.3	2.9	2.9
(5)	5.3	4.5	4.5	4.5	4.5
(T)	10.5	0	0	0	0
IC304 (4)		2.2	2.2	2.2	2.2
0		9.4	9.4	9.4	9.4
0	7.3	2.5	2.5	2.6	2.5
<del>0</del>	1	2.5	2.6	2.6	1:.5
<u> </u>		2.2	2.2	2.2	-
<u></u>		2.2		-	2.2
IC305 ①			2.2	2.3	2.2
		2.8	0	2.8	2.8
<u> </u>	1	2.5	2.4	2.4	1.3
		4.1	4.1	4.2	4.5
<u> </u>	0.4	0	0	0	0.1
	2.6	2.5	2.4	2.5	2.7
<b>20</b>	0	0.8	0.8	0.9	0.9
8	2.1	1.9	1.9	1.9	2.7
IC306 ①		8.1	8.1	8.1	0
2	0	0	0.1	0.1	4.4
IC309 ②	3.6	3.6	3.6	3.6	
(O)	0	-			3.6
		0	0	0	4.4
IC310 ①	6.2	6.2	6.2	6.2	5.9
3	6.3	6.2	6.2	6.2	5.9
<u> </u>	5.9	6.0	6.3	5.9	5.9
IC311 ②	6.2	6.2	6.2	6.2	5.9
•	6.2	6.3	6.2	6.2	5.9
(5)	0.4	0.4	0.4	0.5	0.7
6	3.3	2.9	2.9	2.9	0
100	5.9	5.9	6.2	5.8	
(13)	0.4	0.4	0.4		5.9
IC312 ②	3.6			0.5	0.7
		3.6	3.6	3.6	3.6
<u> </u>	0	0	12.0	0.1	4.5
IC313 ①	0	0	6.3	6.3	6.3
IC314 ②	0	7.6	0	3.0	0
•	0	0	0	2.9	0.1
IC315 ①	0.4	0.4	0.4	0.4	0.6
•	0.6	0.6	0.6	0.6	0.6
(9)	9.4	9.3	9.2	9.3	9.4
0	2.5	2.5	2.5	2.5	
0	0.4	0.4	0.4		7.2
(3)				0.4	0.6
C317 (1)	0.4	0.4	0.4	0.4	0.6
	2.0	2.0	2.1	2.0	12.0
<u> </u>	12.0	12.0	12.0	12.0	12.0
9	10.7	10.6	10.6	10.5	10.7
19	9.4	9.4	9.4	9.1	9.4
C318 (5)	11.5	0	11.4	11.4	11.4
C320 ①	6.3	6.3	6.3	6.3	0
2	3.0	0	3.1	0	0
•	0	0	0	3.3	0
C321 ②	0	0.1	0	2.9	0
<u> </u>	0	0.1	0		
C322 (§				0.1	2.7
	5.8	6.0	6.3	5.9	5.9
C323 (§	6.2	6.2	6.2	6.2	5.9
0	0	5.6	5.6	5.6	5.6
C324 (§	6.2	6.2	6.2	6.2	5.9
C326 ①	5.9	6.0	6.3	5.9	5.9
2	5.9	5.9	6.2	5.8	5.9
3	5.9	5.9	6.2	5.8	5.9
<u> </u>	1.7	1.6			
0	2.4	2.3	1.6	2.1	2.1 4.6

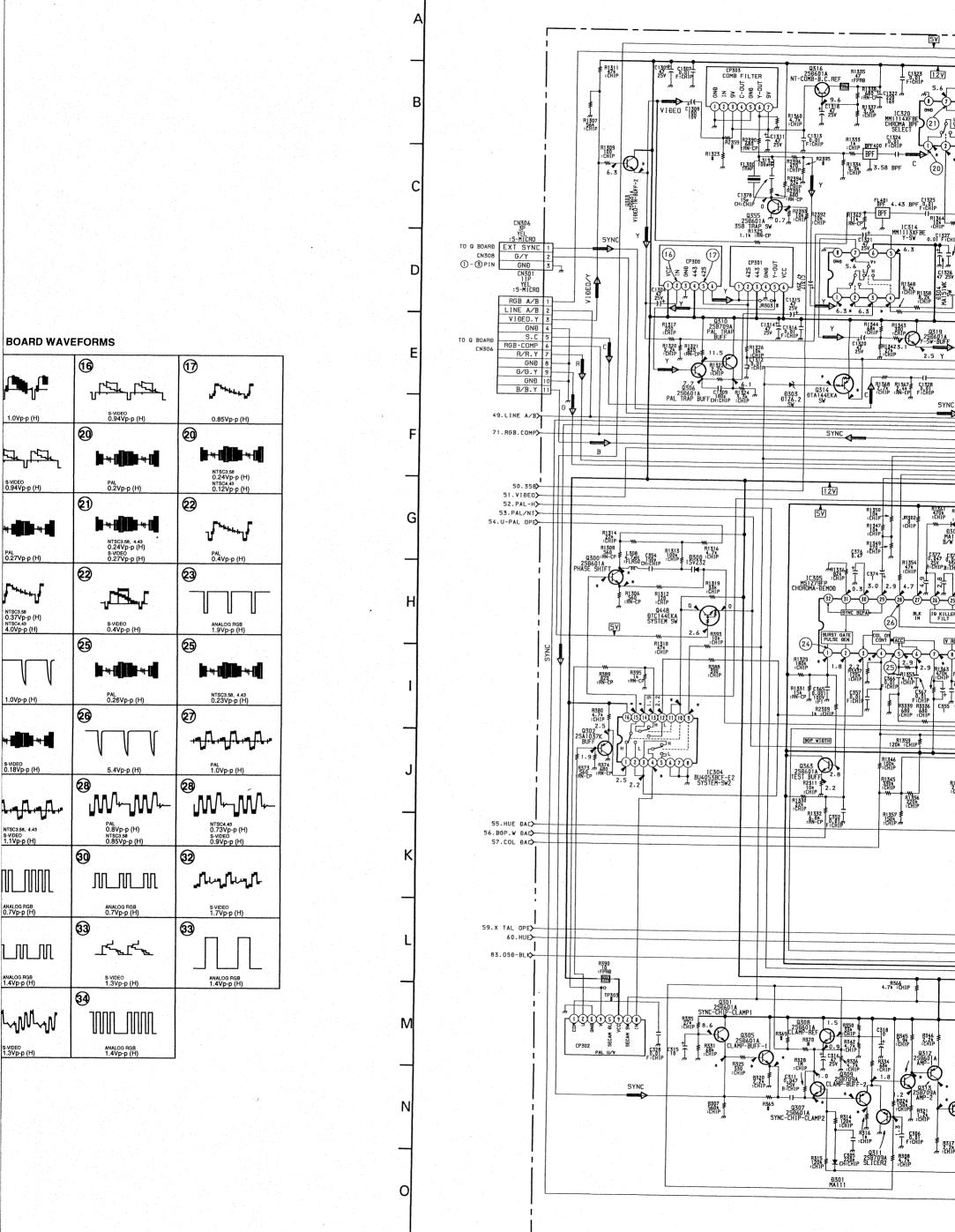
	· · · · · ·	LAUTEG	Luzoo	<u> </u>	T
	PAL	NTSC 3.58	NTSC 4.43	S-VIDEO	ANALOG
IC326 ①	0	10.8	0	-0.1	0
8	6.3	6.3	6.3	6.2	5.9
9	6.3	6.3	6.3	6.2	5.9
10	6.3	6.2	6.2	6.2	5.9
12	6.2	6.2	6.2	6.2	5.9
(13)	6.2	6.2	6.3	6.2	5.9
(1)	6.2	6.2	6.2	6.2	5.9
IC350 ①	6.6	6.4	6.3	6.1	6.9
2	6.2	6.2	6.3	6.0	6.4
3	6.2	6.2	6.3	6.0	6.4
Q300 B	2.5	2.2	2.2	2.2	2.2
С	10.2	10.4	10.5	10.4	10.5
E	1.9	1.6	1.6	1.6	1.6
Q301 E	8.6	8.2	8.3	8.5	<del> </del>
Q303 E	5.7	5.7	5.7		9.8
Q304 B	6.3	6.3		5.5	5.7
C4304 B			6.4	6.2	6.3
Q305 B	5.7	5.7	5.7	5.5	5.7
	8.6	8.2	8.3	8.5	9.8
E 0207 E	7.9	7.6	7.7	7.9	9.1
Q307 E	1.4	1.1	1.2	1.4	2.7
Q309 B	1.4	1.1	1.2	1.4	2.6
C	0.1	0.2	0.1	0.1	0
Ε	0.7	1.7	1.8	0	1.8
Q312 B	0.7	1.7	1.8	0	1.8
C	8.2	8.6	8.3	8.3	8.1
Q313 B	8.2	8.6	8.3	8.2	8.1
C	3.3	2.9	3.1	3.2	3.3
E	8.8	9.3	9.0	8.9	8.7
Q314 B	11.9	11.9	11.9	11.9	11.9
С	0	0	0	0	0
Q315 B	3.3	2.9	3.1	3.2	3.3
E	3.9	3.5	3.8	+	
Q318 B	12.1	11.7		3.8	4.0
C			11.9	12.1	12.1
	1.0	1.2	1.0	1.0	0.9
Q322 B	2.4	2.3	2.3	5.6	2.4
E	1.8	1.8	1.8	5.0	1.8
Q323 B	5.0	0	0 -	0	0
C	0	3.5	3.5	3.5	3.6
Q324 B	4.1	0	0	0	0
С	0	0.8	0.8	0.8	0.9
Q332 B	4.9	0	4.9	0	0
С	0	4.4	0	4.3	4.4
Q333 B	1.7	1.9	1.8	1.7	1.7
E	1.5	1.7	1.5	1.5	1.4
Q336 G	4.7	4.6	4.7	4.2	4.8
D	4.3	4.3	4.3	4.5	4.3
Q339 B	12.3	12.5	12.4	12.5	12.3
Q354 B	12.0	0	0	0	0
E	12.0	0	0		
Q358 E	2.2	0		0	-0.2
			2.2	2.2	2.2
2360 1	6.2	6.2	6.3	6.1	6.4
3	6.2	6.2	6.3	6.0	6.4
5	1.3	2.2	4.1	5.3	3.8
Q362 C	9.0	9.0	9.5	9.2	8.5
Q364 C	3.3	2.9	2.9	2.8	2.9
2365 B	0.4	0.3	0.3	0.4	0.4
Q369 B	0.8	0.8	0.8	0.9	4.9
Q372 B	0	0	0	0	4.9
С	11.7	11.8	11.8	11.7	0

## A (2/3) BOARD \* MARK LIST

	20INCH MODEL	14INCH MODEL
C1302	390p :CHIP	470p CH:CHIP
Q373	DTC144EKA	#
R354	820k :CHIP	1.2M :CHIP
R2357	#	56k :CHIP
R2367	100k :CHIP	120k :CHIP
R3350	330k :CHIP	820k :CHIP
R3351	560k :CHIP	820k :CHIP
R3353	390k :CHIP	#
R3365	120k :CHIP	#
R3366	68k :CHIP	#
R3367	68k :CHIP	#
R3368	22k :CHIP	#
3369	47k :CHIP	#
R3380	1M :CHIP	#
R3398	36k RN-CP	27k :RN-CP

## A (2/3) BOARD WAVEFORMS

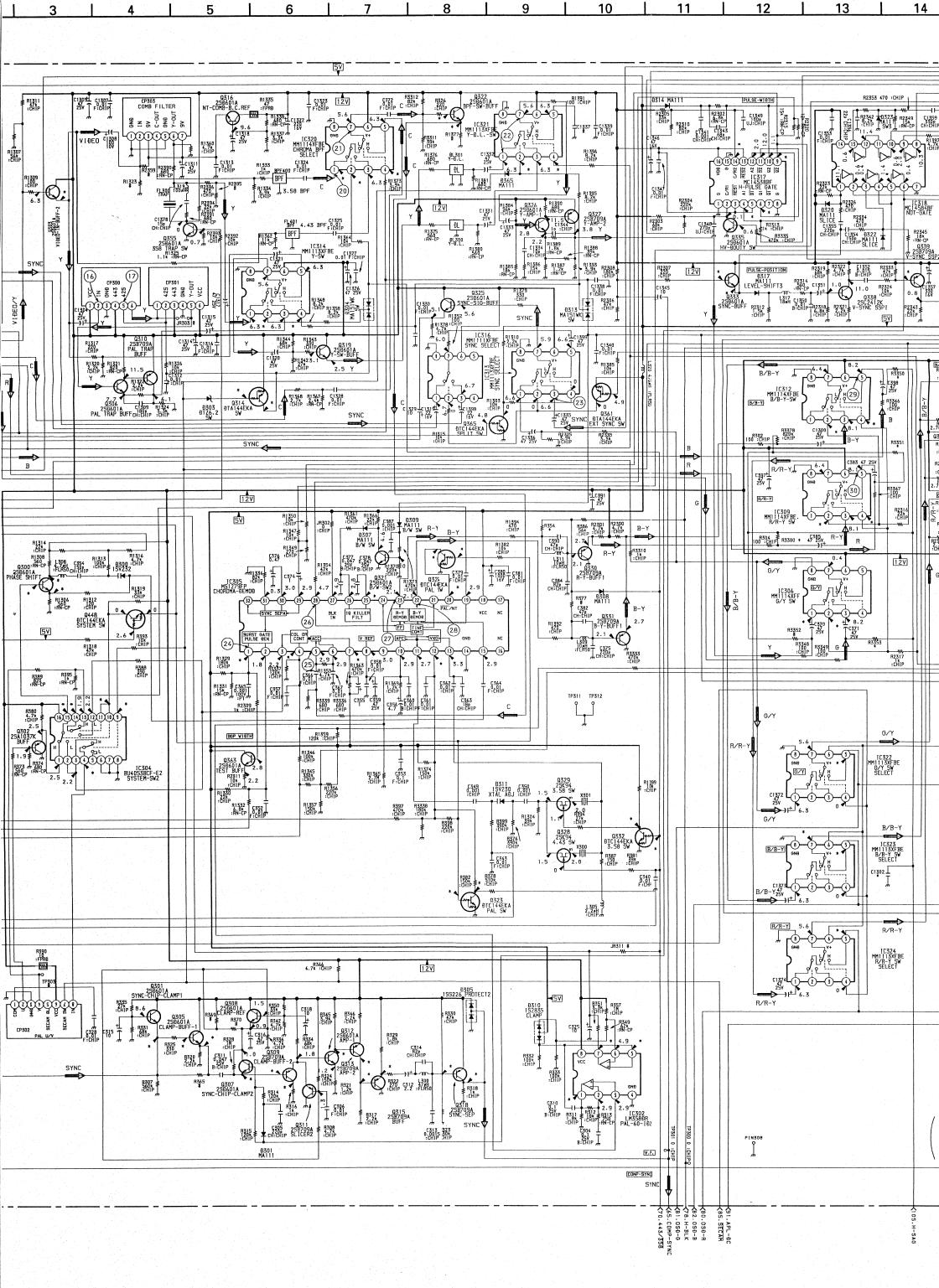


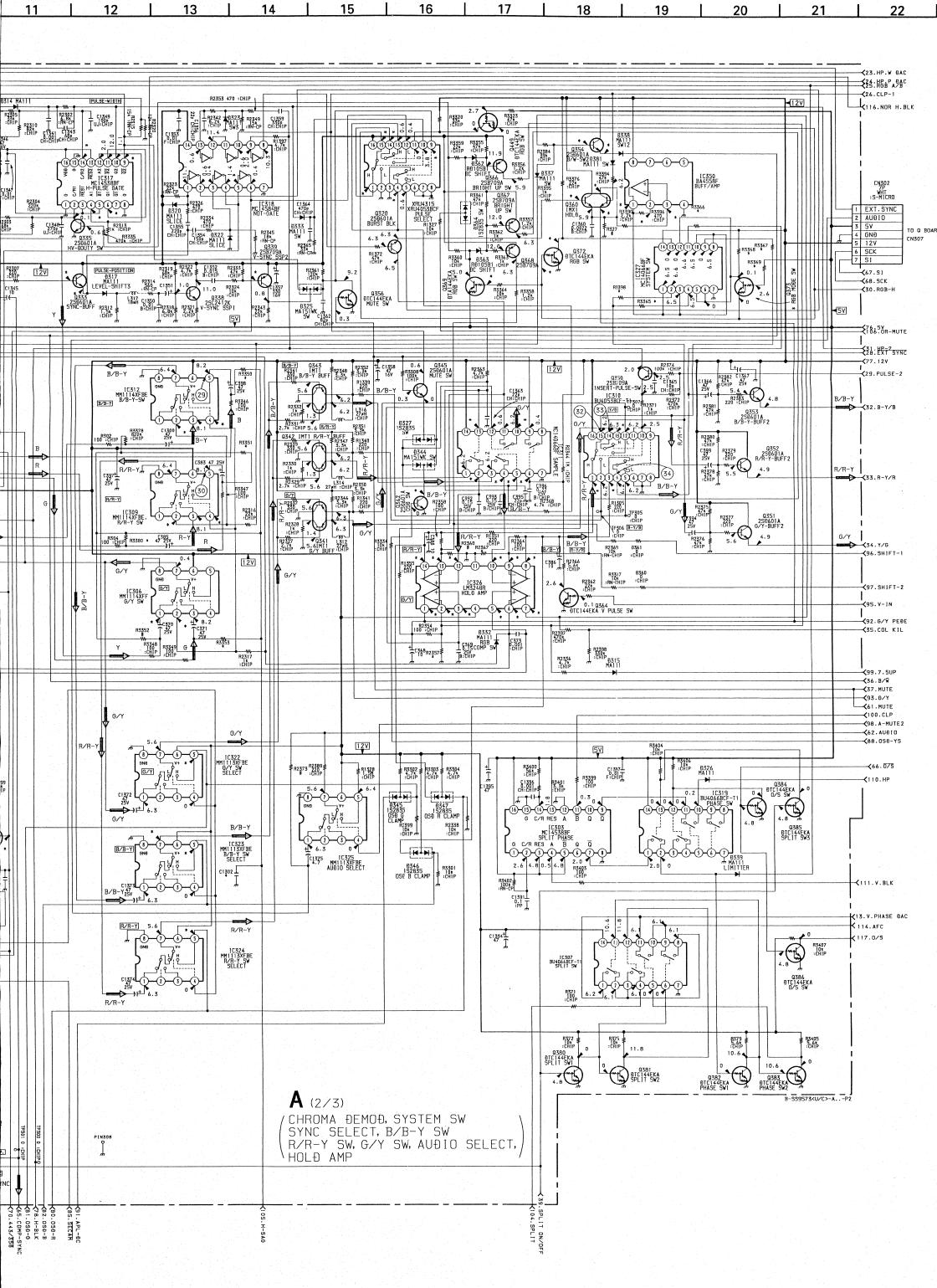


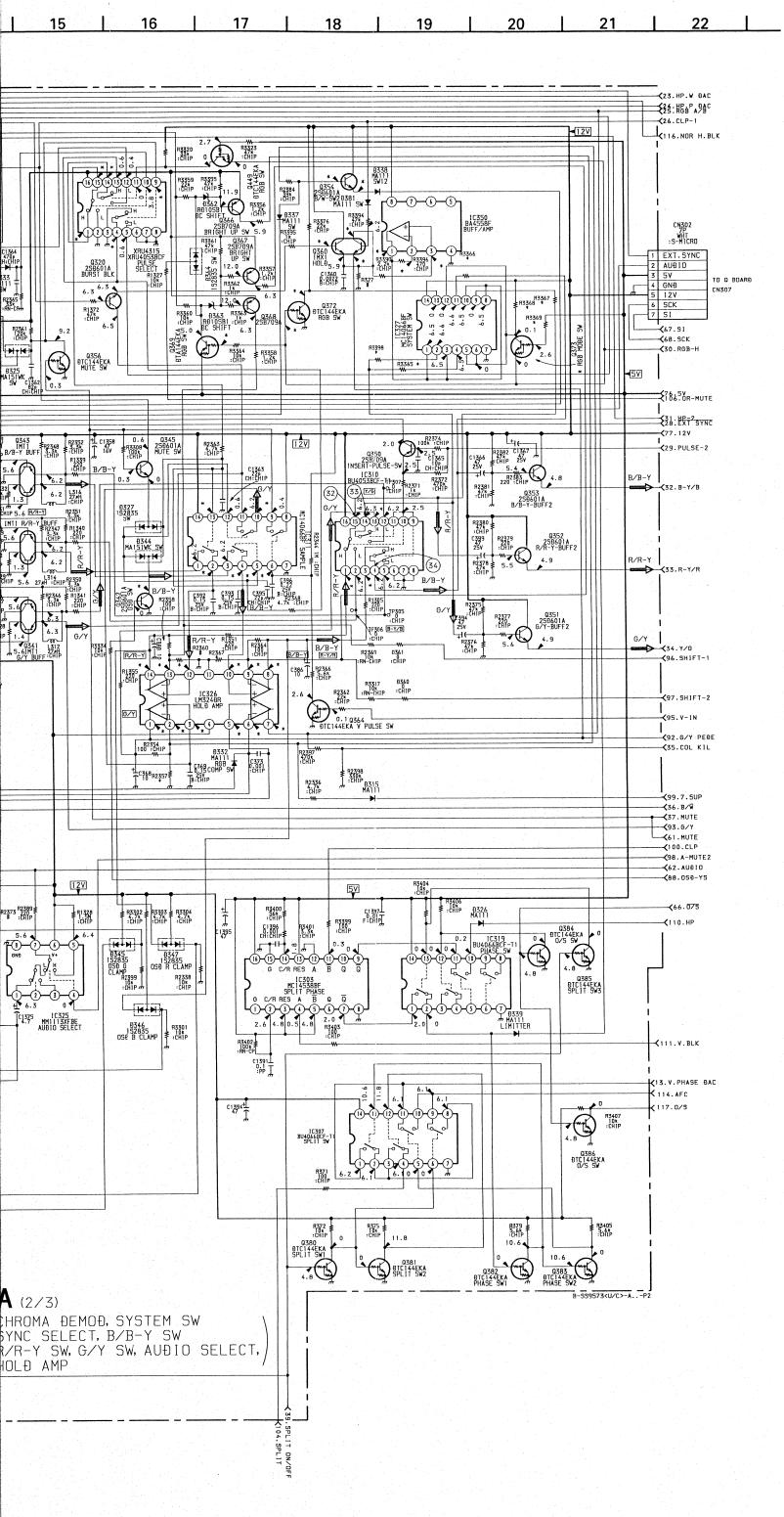
6-31

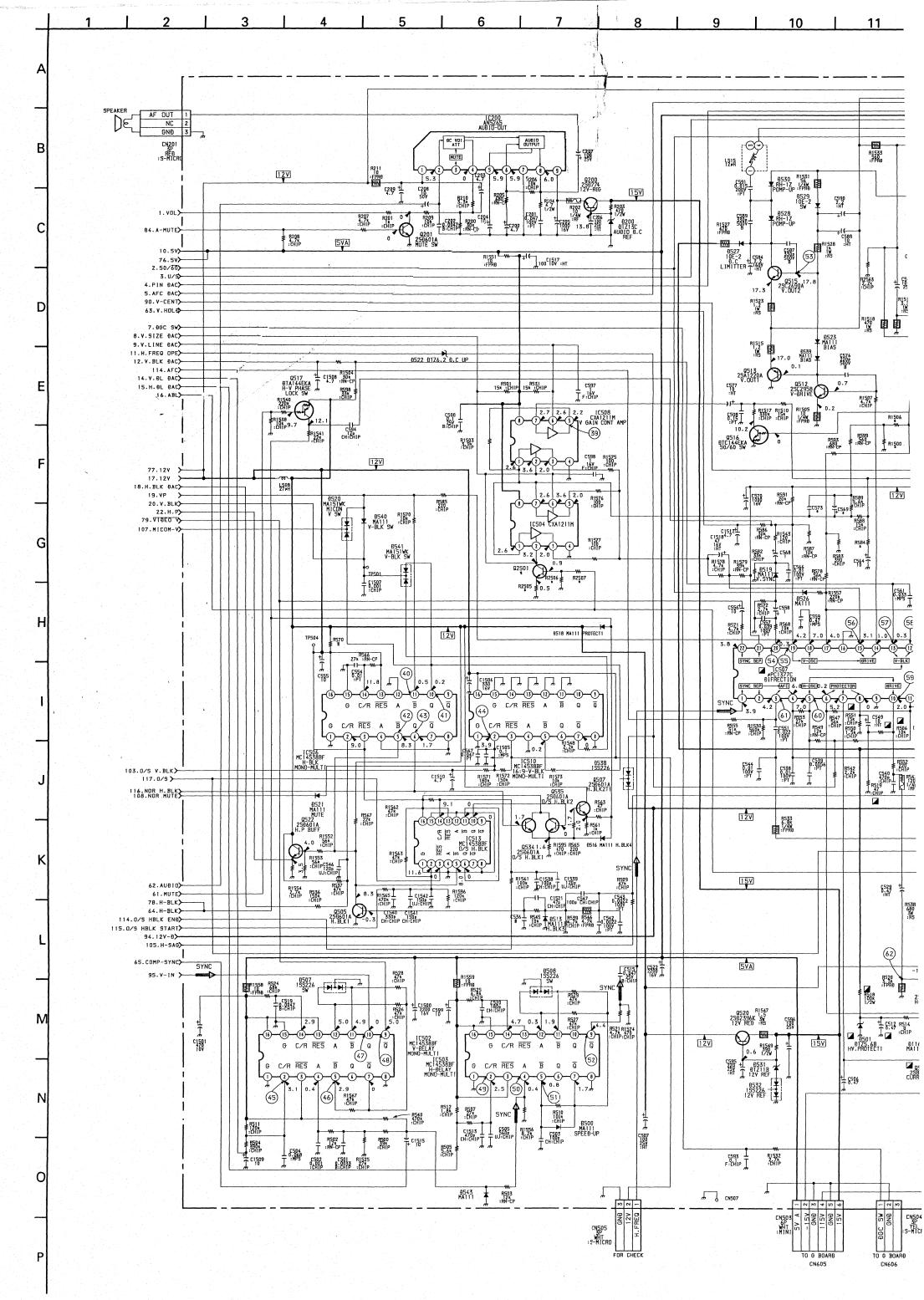
RI 345

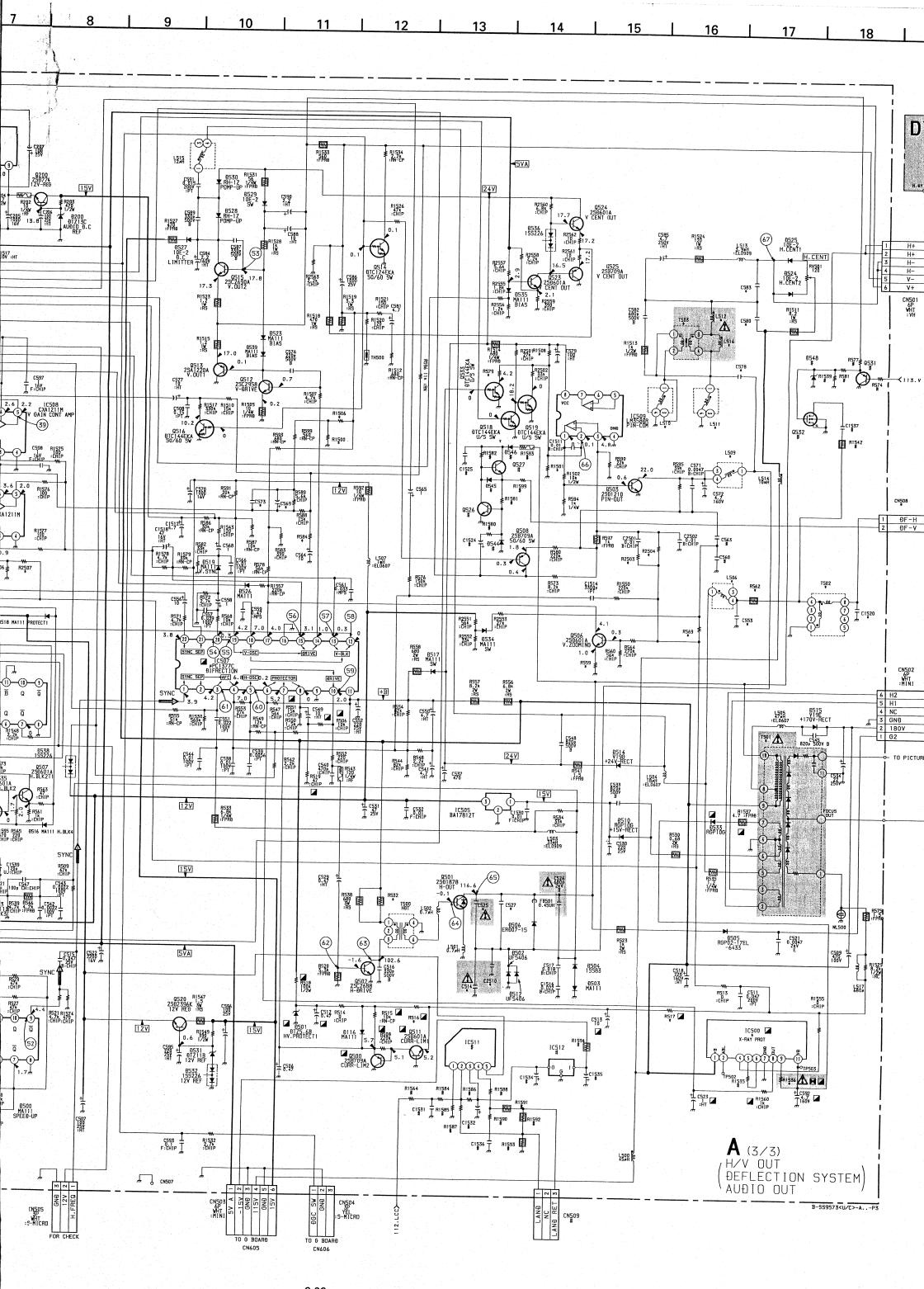
R329 1.8k :CHIP

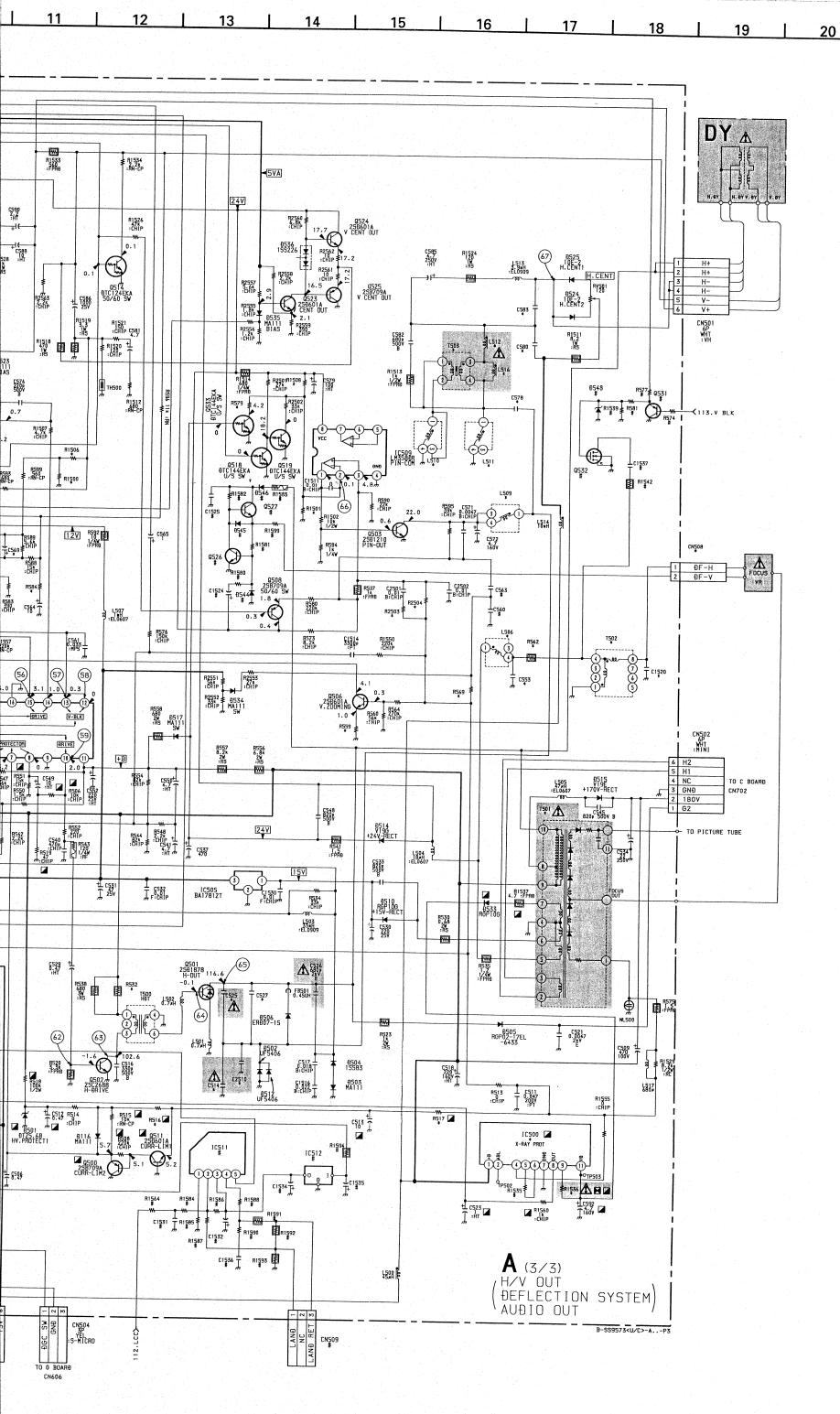


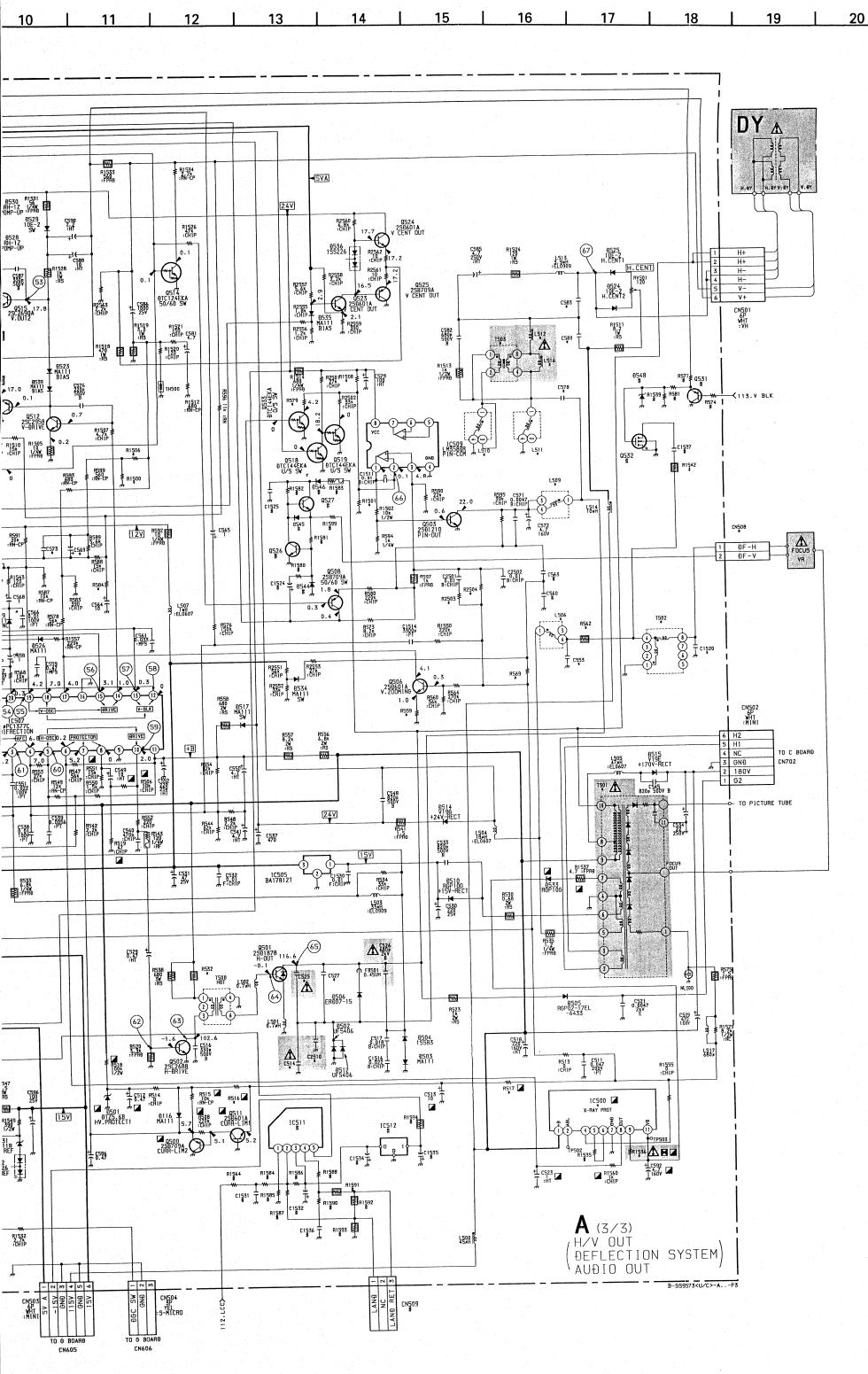


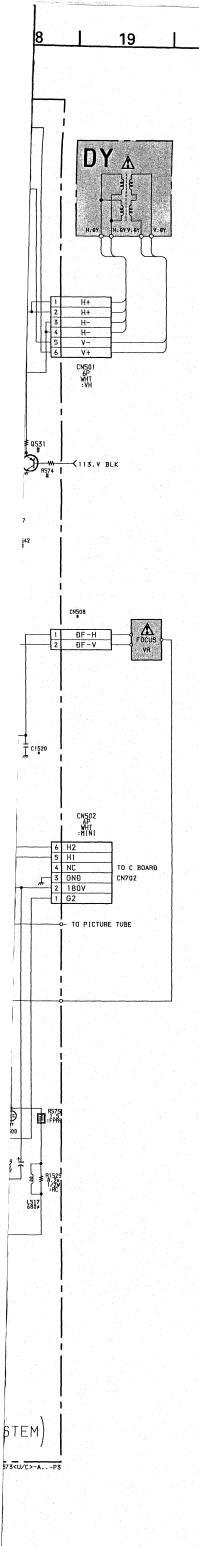






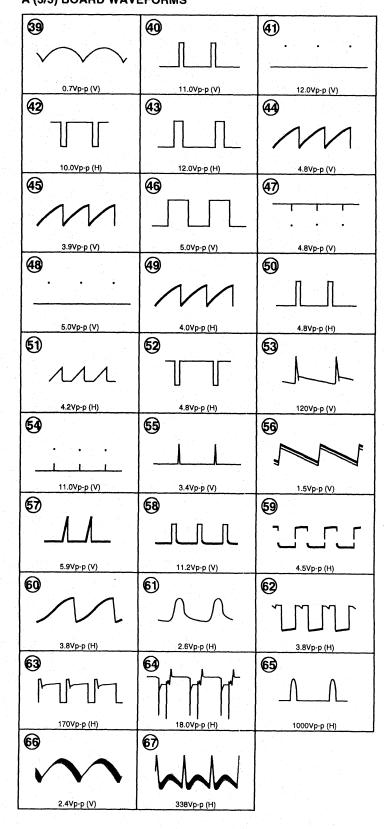






20

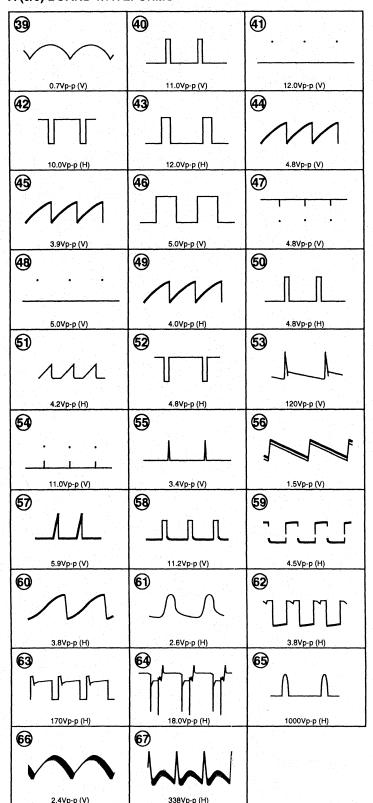
## A (3/3) BOARD WAVEFORMS



#### A (3/3) BOARD \* MARK LIST

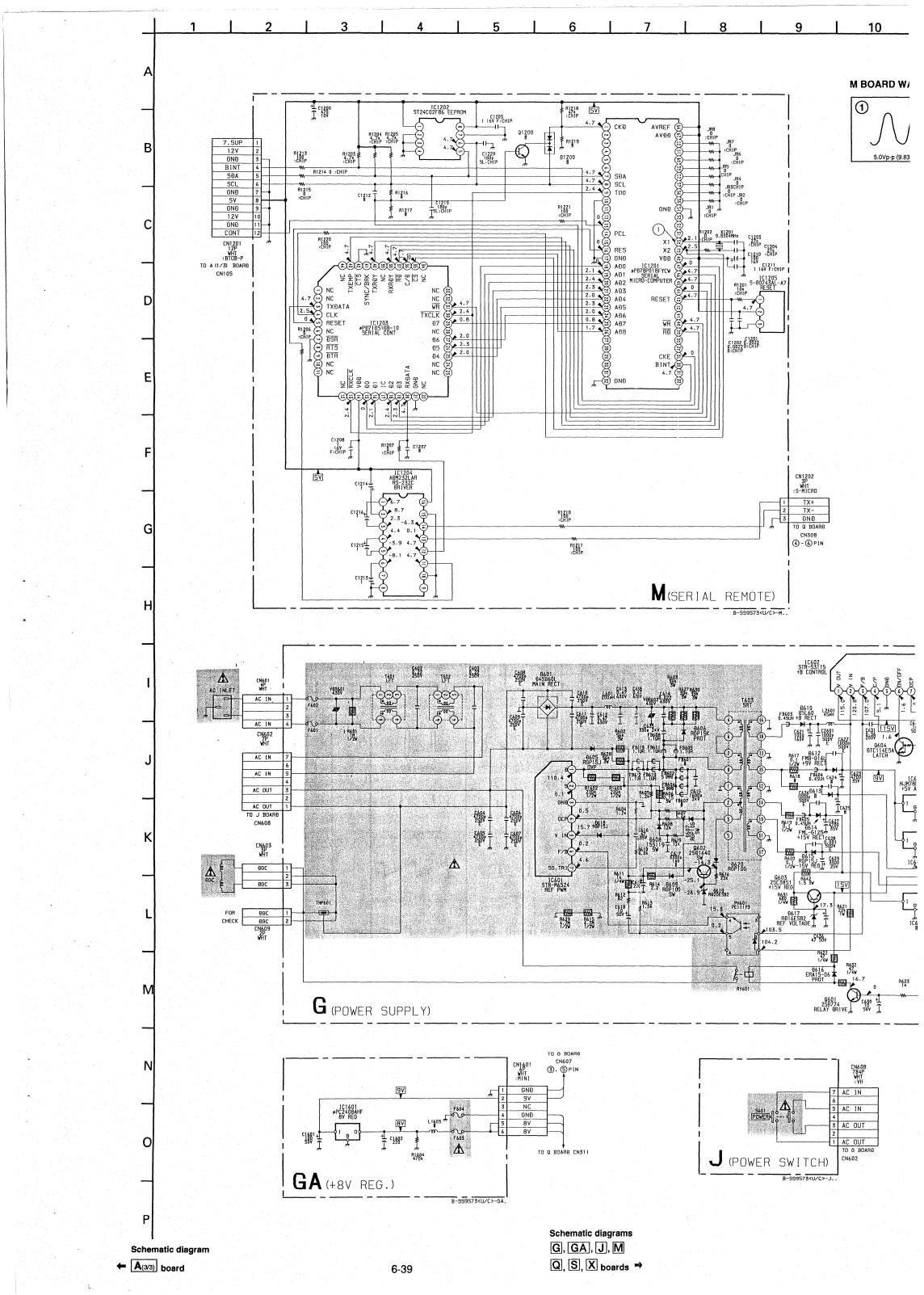
	20INCH MODEL	14INCH M
C514	0.022 630V :PP	0.01 630V :PP
C525	0.012 2kV :PP	0.01 2kV :PP
C527	#	470p 2kV
C553	0.082 200V :PT	#
C569	3.3 25V :TA	4.7 25V :TA
C573	1 :MPS	0.47 :MPS
C578	1.0 200V :PP	1.4 200V :PP
C580	0.33 200V :PP	0.24 200V :PP
C583	1.5 200V :PP	1.8 200V :PP
C1520	150p 2kV B	#
C2510	#	0.0015 630V :P
CN508	2P WHT :MINI	#
IC500	H8D7249	H8D7248
L506	COIL, DUST CORE	#
L509	HCC	DYNAMIC CONV
L510	:PMC	#
L511	#	COIL
L512	90μH	45µH
L516	#	:HLC
Q2501	2SD601A	#
R516	100k :CHIP	180k :CHIP
R517	20k 1/2W :RN	10k 1/2W :RN
R532	680 3W :RS	3.3k 3W :RS
R559	330k :CHIP	220k :CHIP
R562	22 1/4W :FPRD	#
R569	47k 1/2W	18k 1/2W
R579	15k :CHIP	22k :CHIP
R584	10k :CHIP	8.2k :CHIP
R1500	820 :RN-CP	680 :RN-CP
R1501	8.2k :CHIP	12k :CHIP
R1506	470 :CHIP	220 :CHIP
R1508	39k :CHIP	27k :CHIP
R1536	62k :RN-CP	75k :RN-CP
R2503	100k :CHIP	47k :CHIP
R2504	150k :CHIP	100k :CHIP
R2505	470k :CHIP	#
R2506	120k :CHIP	#
R2507	220k :CHIP	#
T501	1-453-234-11	1-453-233-11
T502	DFT	#
T503	HLC	#

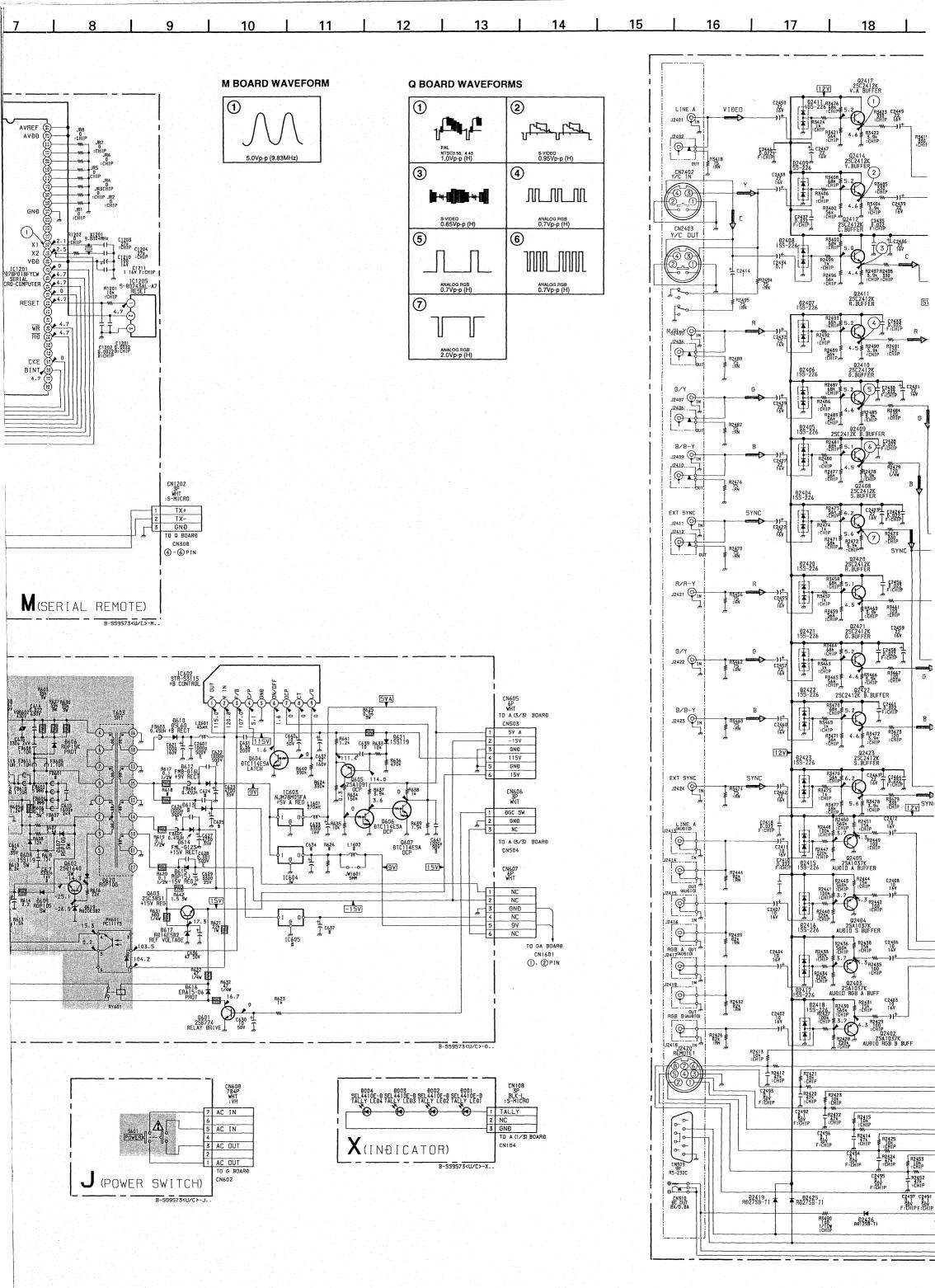
## A (3/3) BOARD WAVEFORMS

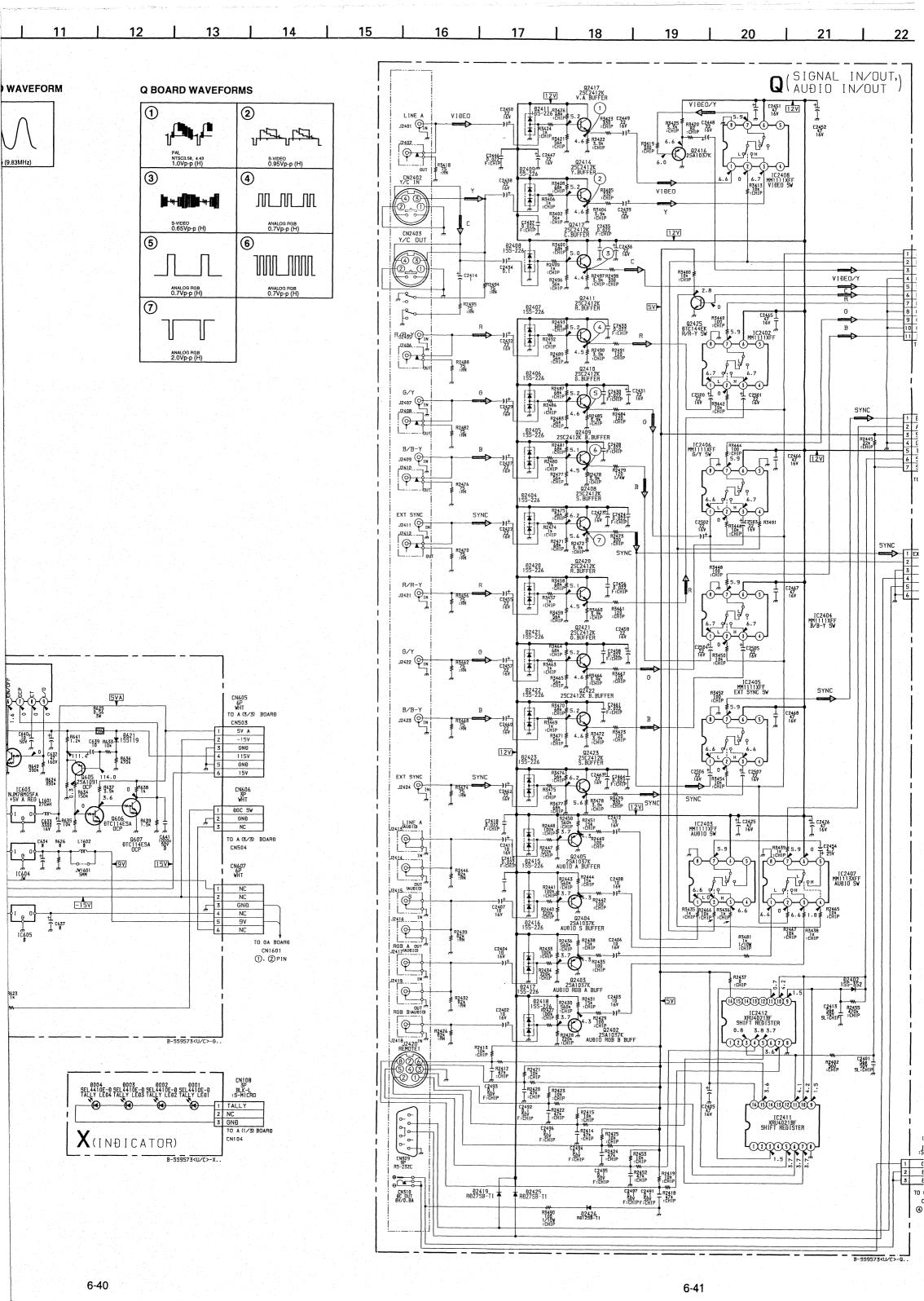


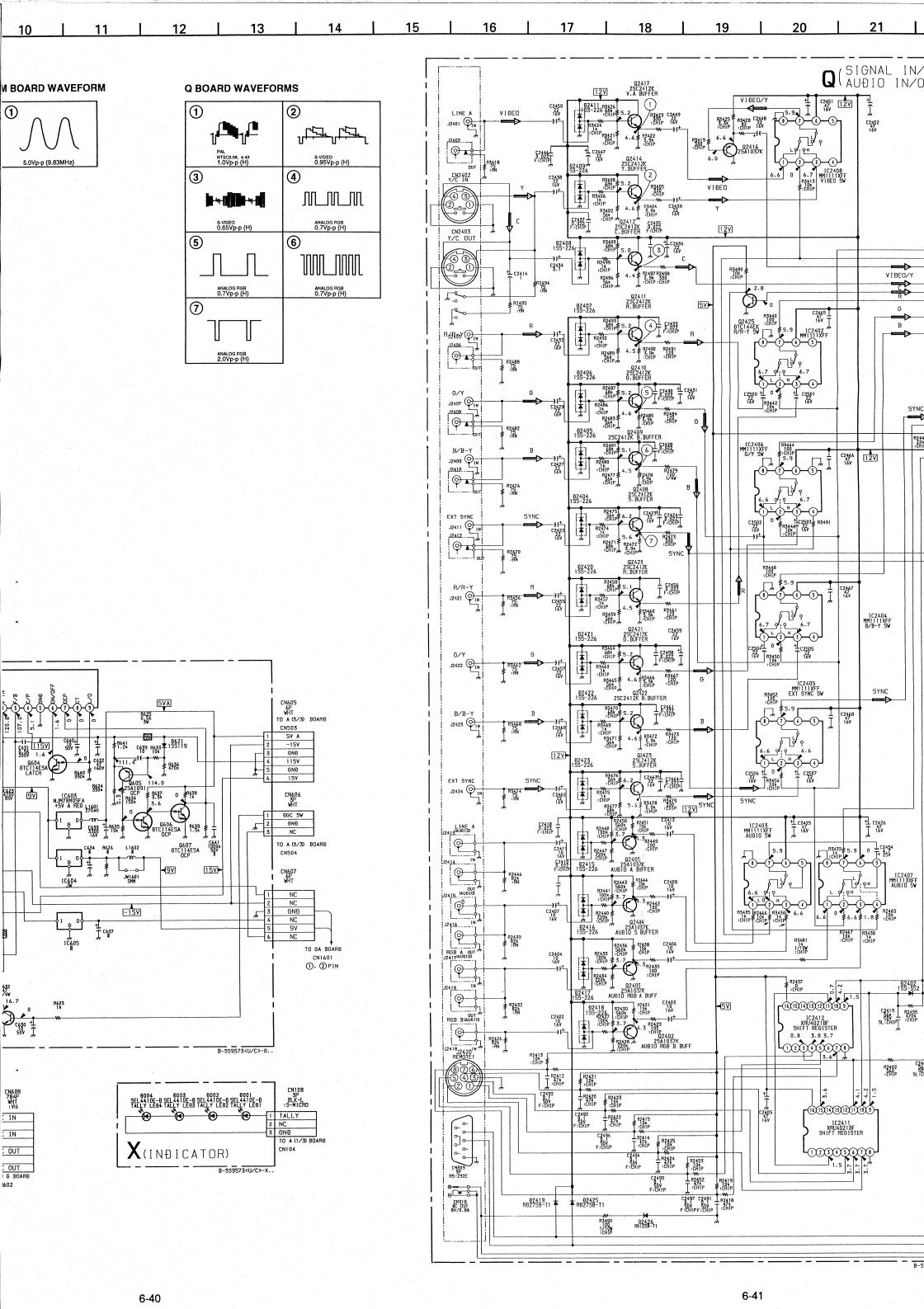
## A (3/3) BOARD \* MARK LIST

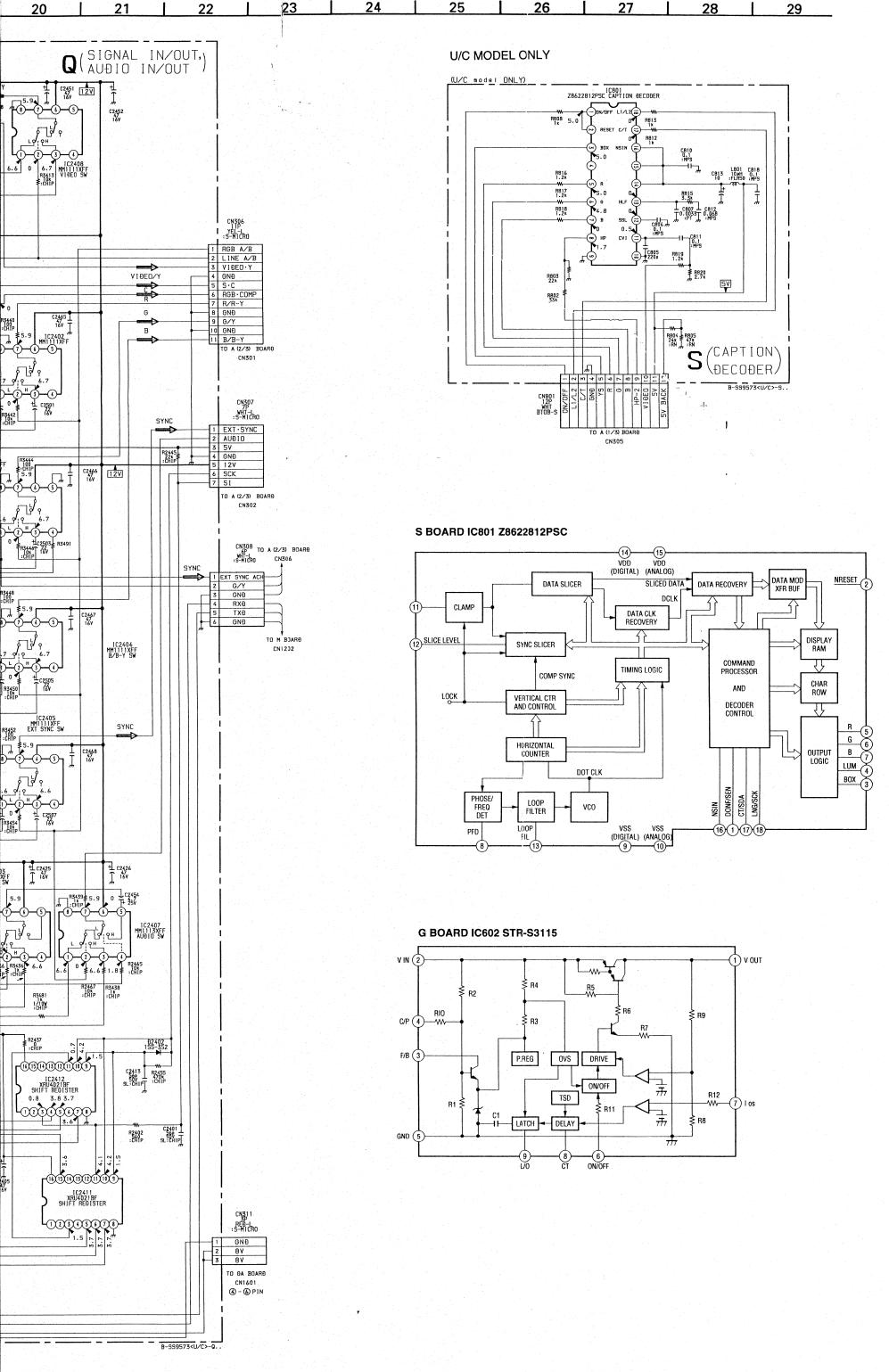
	20INCH MODEL	14INCH MODEL	
C514	0.022 630V :PP	0.01 630V :PP	
C525	0.012 2kV :PP	0.01 2kV :PP	
C527	#	470p 2kV	
C553	0.082 200V :PT	#	
C569	3.3 25V :TA	4.7 25V :TA	
C573	1 :MPS	0.47 :MPS	
C578	1.0 200V :PP	1.4 200V :PP	
C580	0.33 200V :PP	0.24 200V :PP	
C583	1.5 200V :PP	1.8 200V :PP	
C1520	150p 2kV B	#	
C2510	#	0.0015 630V :PP	
CN508	2P WHT :MINI	#	
IC500	H8D7249	H8D7248	
L506	COIL, DUST CORE	#	
L509	HCC	DYNAMIC CONVERSION	
L510	:PMC	#	
L511	#	COIL	
L512	90µH	45µH	
L516	#	:HLC	
Q2501	2SD601A	#	
R516	100k :CHIP	180k :CHIP	
R517	20k 1/2W :RN	10k 1/2W :RN	
R532	680 3W :RS	3.3k 3W :RS	
R559	330k :CHIP	220k :CHIP	
R562	22 1/4W :FPRD	#	
R569	47k 1/2W	18k 1/2W	
R579	15k :CHIP	22k :CHIP	
R584	10k :CHIP	8.2k :CHIP	
R1500	820 :RN-CP	680 :RN-CP	
R1501	8.2k :CHIP	12k :CHIP	
R1506	470 :CHIP	220 :CHIP	
R1508	39k :CHIP	27k :CHIP	
R1536	62k :RN-CP	75k :RN-CP	
R2503	100k :CHIP	47k :CHIP	
R2504	150k :CHIP	100k :CHIP	
R2505	470k :CHIP	#	
R2506	120k :CHIP	- <del>                                     </del>	
R2507	220k :CHIP	#	
T501	1-453-234-11	1-453-233-11	
T502	DFT	#	
T502	HLC	#	
, 500	I LIEV	Įπ	







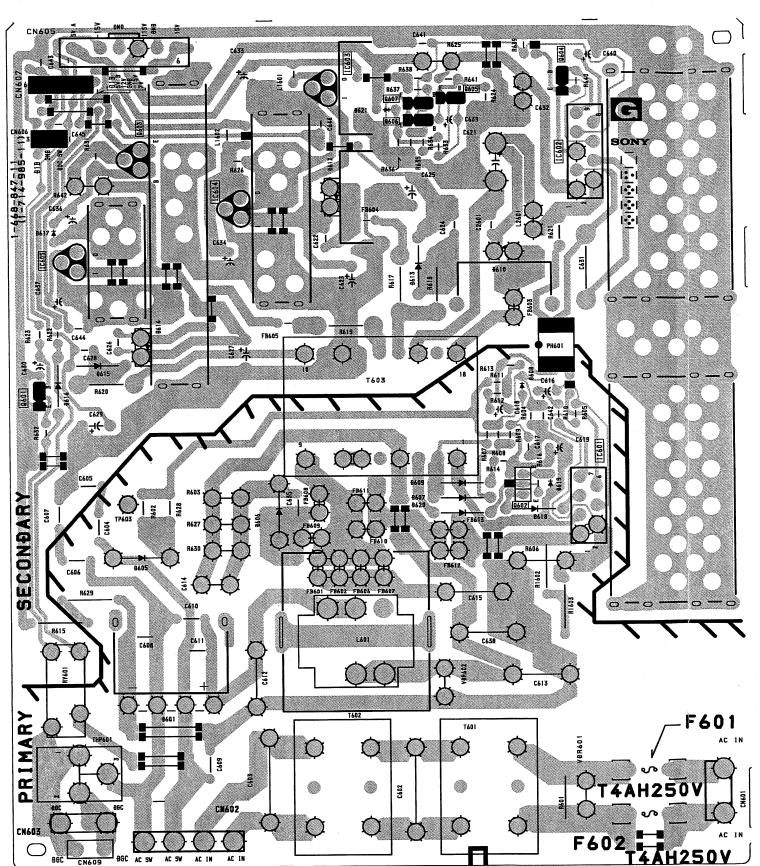




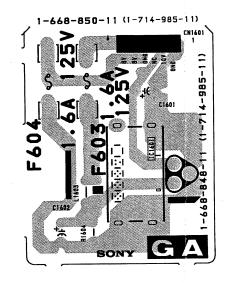


 $-\,\mathrm{M}\,\mathrm{BO}$ 

# - G BOARD -

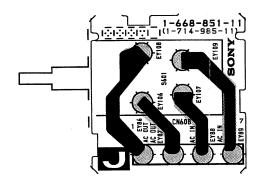




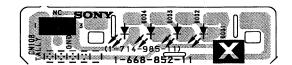




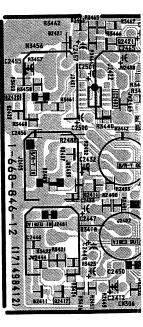
### - J BOARD -



# - X BOARD -



# - Q BOARD -

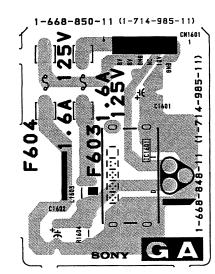




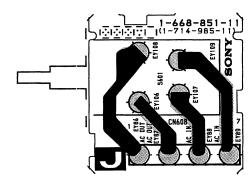




### - GA BOARD -



### - J BOARD -



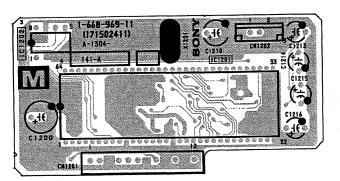
#### - X BOARD -



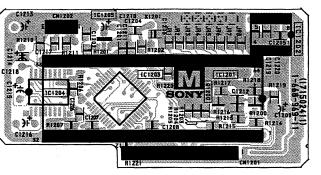




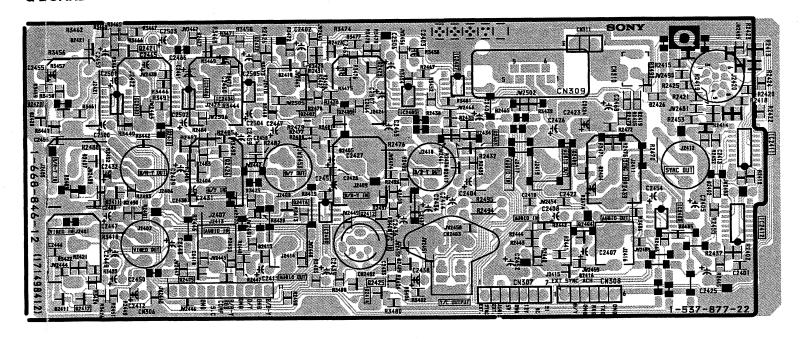
### - M BOARD - <A Side>



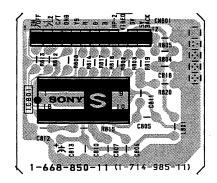




### - Q BOARD -

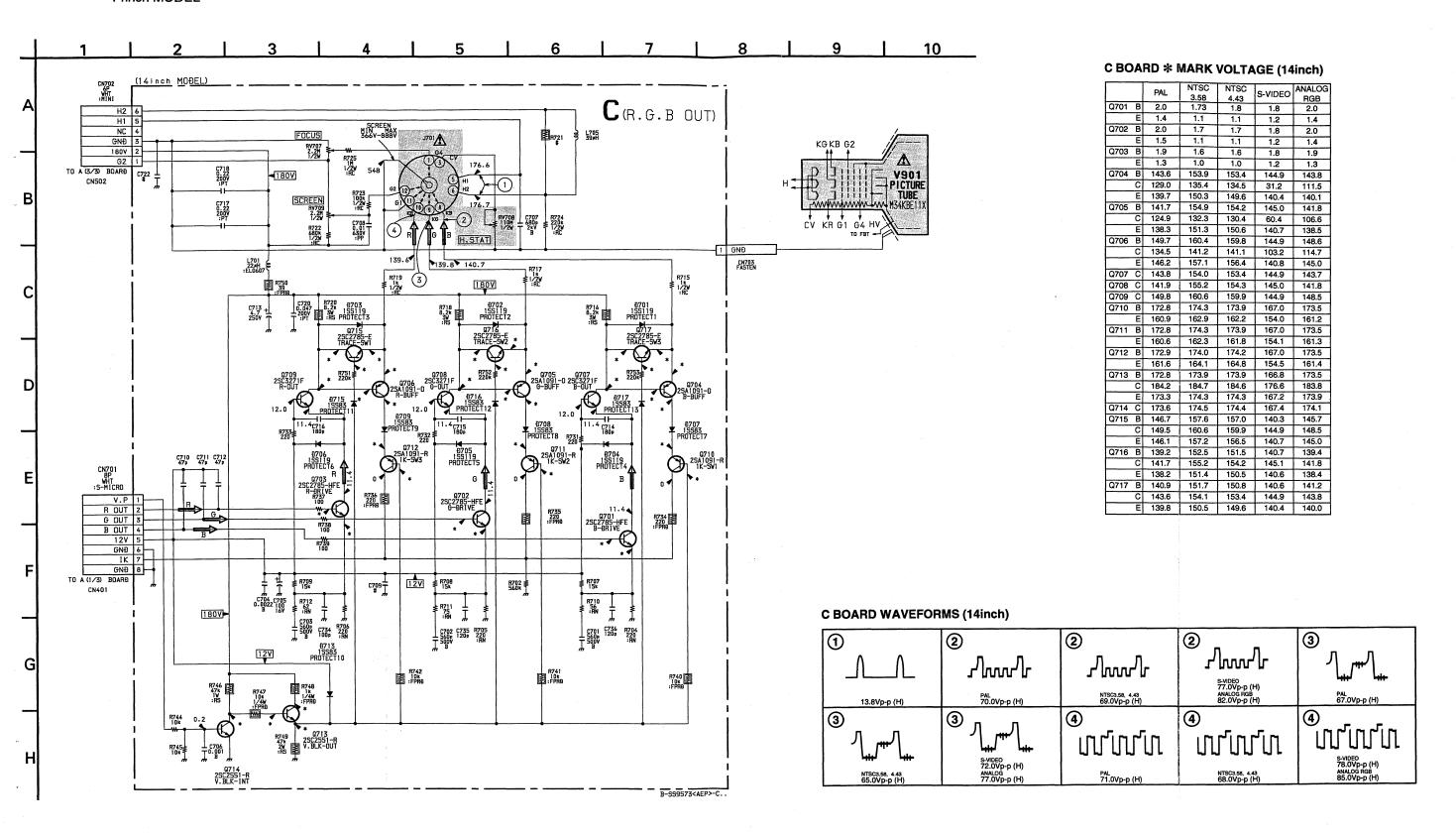


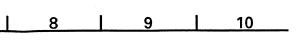
#### U/C MODEL ONLY - S BOARD -

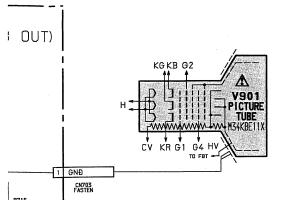




F601







# C BOARD \* MARK VOLTAGE (14inch)

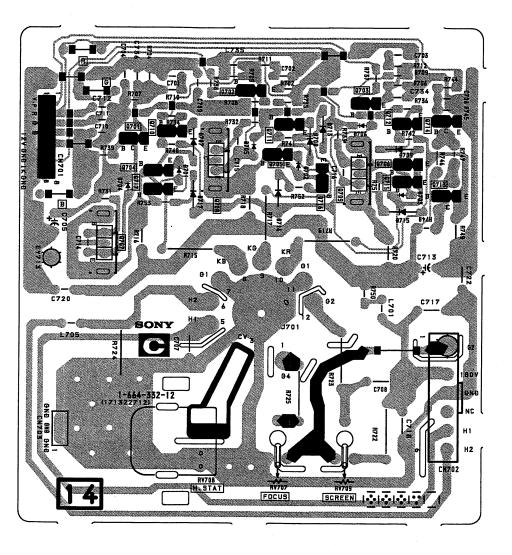
		PAL	NTSC	NTSC	S-VIDEO	ANALOG
			3.58	4.43	2-VIDEO	RGB
Q701	В	2.0	1.73	1.8	1.8	2.0
	Е	1.4	1.1	1.1	1.2	1.4
Q702	В	2.0	1.7	1.7	1.8	2.0
	Е	1.5	1.1	1.1	1.2	1.4
Q703	В	1.9	1.6	1.6	1.8	1.9
	E	1.3	1.0	1.0	1.2	1.3
Q704	В	143.6	153.9	153.4	144.9	143.8
	С	129.0	135.4	134.5	31.2	111.5
	E	139.7	150.3	149.6	140.4	140.1
Q705	В	141.7	154.9	154.2	145.0	141.8
	С	124.9	132.3	130.4	60.4	106.6
	E	138.3	151.3	150.6	140.7	138.5
Q706	В	149.7	160.4	159.8	144.9	148.6
	C	134.5	141.2	141.1	103.2	114.7
	E	146.2	157.1	156.4	140.8	145.0
Q707	C	143.8	154.0	153.4	144.9	143.7
Q708	C	141.9	155.2	154.3	145.0	141.8
Q709	C	149.8	160.6	159.9	144.9	148.5
Q710	В	172.8	174.3	173.9	167.0	173.5
	E	160.9	162.9	162.2	154.0	161.2
Q711	В	172.8	174.3	173.9	167.0	173.5
	E	160.6	162.3	161.8	154.1	161.3
Q712	В	172.9	174.0	174.2	167.0	173.5
	E	161.6	164.1	164.8	154.5	161.4
Q713	В	172.8	173.9	173.9	166.8	173.5
	С	184.2	184.7	184.6	176.6	183.8
	E	173.3	174.3	174.3	167.2	173.9
Q714	c	173.6	174.5	174.4	167.4	174.1
Q715	В	146.7	157.6	157.0	140.3	145.7
	С	149.5	160.6	159.9	144.9	148.5
	E	146.1	157.2	156.5	140.7	145.0
Q716	В	139.2	152.5	151.5	140.7	139.4
	c	141.7	155.2	154.2	145.1	141.8
	E	138.2	151.4	150.5	140.6	138.4
Q717	В	140.9	151.7	150.8	140.6	141.2
	С	143.6	154.1	153.4	144.9	143.8
	E	139.8	150.5	149.6	140.4	140.0
				<u> </u>		

CRO	ΔRD	WAVEFORM	IS (14inch)

1	C BOARD WAVELOUMS (14IUCII)									
	1	2	2	2	3					
		ւլտույր	ւլԽուլւ	<sup>57.050</sup> p-p (H)	7					
	13.8Vp-p (H)	PAL 70.0Vp-p (H)	NTSC3.58, 4.43 69.0Vp-p (H)	ANALOG RGB 82.0Vp-p (H)	PAL 67.0Vp-p (H)					
	3	3 , ,	4	4	4					
	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	S-VIDEO	MMM	บบับบับ	S-VIDEO AND					
	NTSC3.58, 4.43 65 OVp-p (H)	72.0Vp-p (H)  ANALOG  77.0Vp-p (H)	PAL 71.0Vp-p (H)	NTSC3.58, 4.43 68.0Vp-p (H)	78.0Vp-p (H) ANALOG RGB 85.0Vp-p (H)					

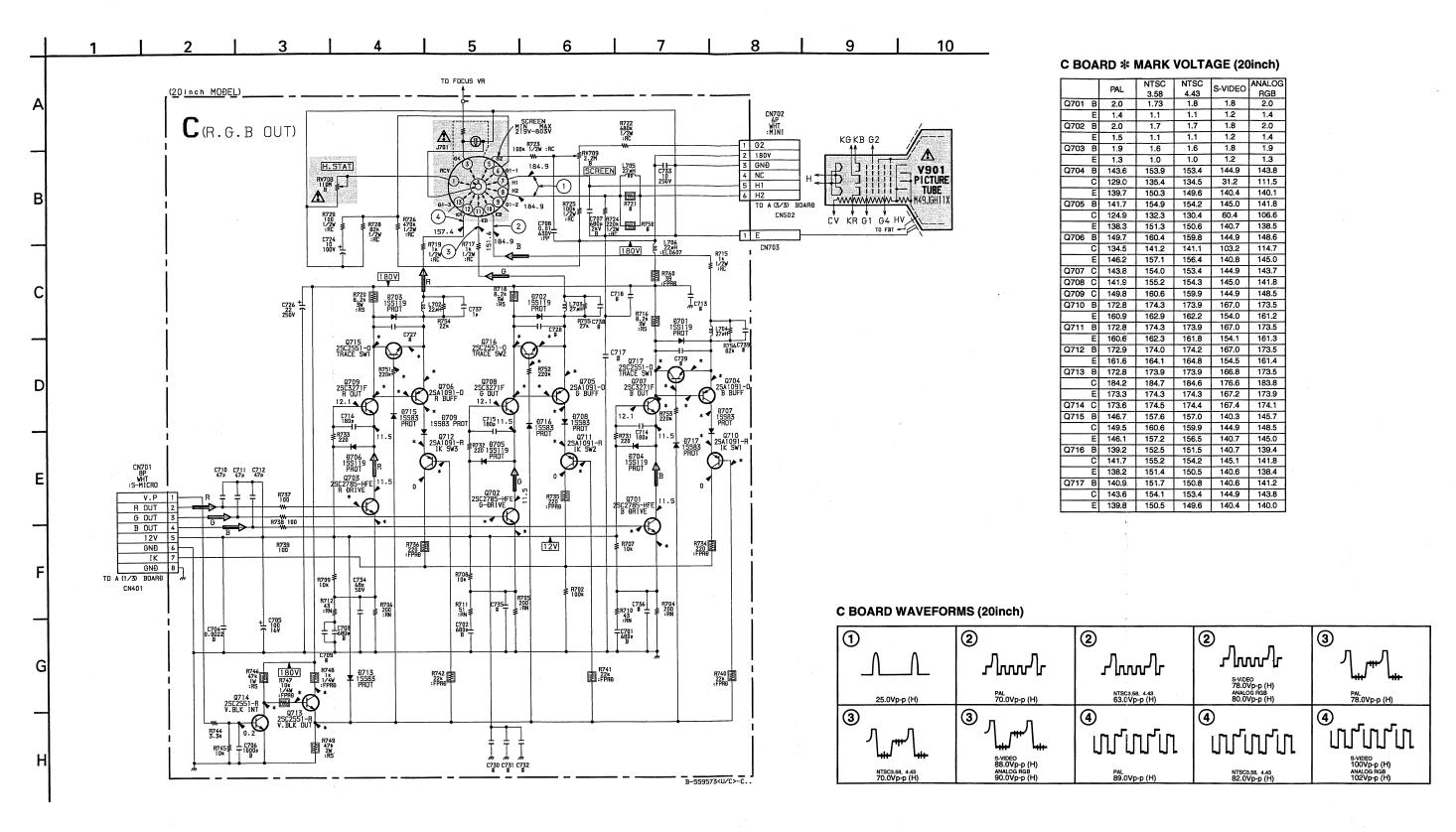


### - C BOARD -

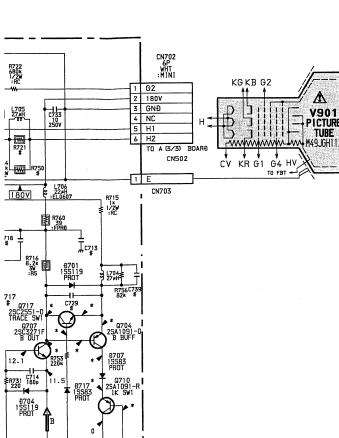


1740 E

359573<AEP>-C..



# 7 | 8 | 9 | 10



### C BOARD \* MARK VOLTAGE (20inch)

	PAL	NTSC 3.58	NTSC 4.43	S-VIDEO	ANALOG RGB
Q701 B	2.0	1.73	1.8	1.8	2.0
E	1.4	1.1	1.1	1.2	1.4
Q702 B	2.0	1.7	1.7	1.8	2.0
E	1.5	1.1	1.1	1.2	1.4
Q703 B	1.9	1.6	1.6	1.8	1.9
E	1.3	1.0	1.0	1.2	1.3
Q704 B	143.6	153.9	153.4	144.9	143.8
С	129.0	135.4	134.5	31.2	111.5
Е	139.7	150.3	149.6	140.4	140.1
Q705 B	141.7	154.9	154.2	145.0	141.8
С	124.9	132.3	130.4	60.4	106.6
E	138.3	151.3	150.6	140.7	138.5
Q706 B	149.7	160.4	159.8	144.9	148.6
С	134.5	141.2	141.1	103.2	114.7
E	146.2	157.1	156.4	140.8	145.0
Q707 C	143.8	154.0	153.4	144.9	143.7
Q708 C	141.9	155.2	154.3	145.0	141.8
Q709 C	149.8	160.6	159.9	144.9	148.5
Q710 E	172.8	174.3	173.9	167.0	173.5
E	160.9	162.9	162.2	154.0	161.2
Q711 B	172.8	174.3	173.9	167.0	173.5
E	160.6	162.3	161.8	154.1	161.3
Q712 B	172.9	174.0	174.2	167.0	173.5
E	161.6	164.1	164.8	154.5	161.4
Q713 E	172.8	173.9	173.9	166.8	173.5
С	184.2	184.7	184.6	176.6	183.8
E	173.3	174.3	174.3	167.2	173.9
Q714 C	173.6	174.5	174.4	167.4	174.1
Q715 E	146.7	157.6	157.0	140.3	145.7
C	149.5	160.6	159.9	144.9	148.5
E	146.1	157.2	156.5	140.7	145.0
Q716 E	139.2	152.5	151.5	140.7	139.4
C	141.7	155.2	154.2	145.1	141.8
E	138.2	151.4	150.5	140.6	138.4
Q717 E	140.9	151.7	150.8	140.6	141.2
C	143.6	154.1	153.4	144.9	143.8
E	139.8	150.5	149.6	140.4	140.0

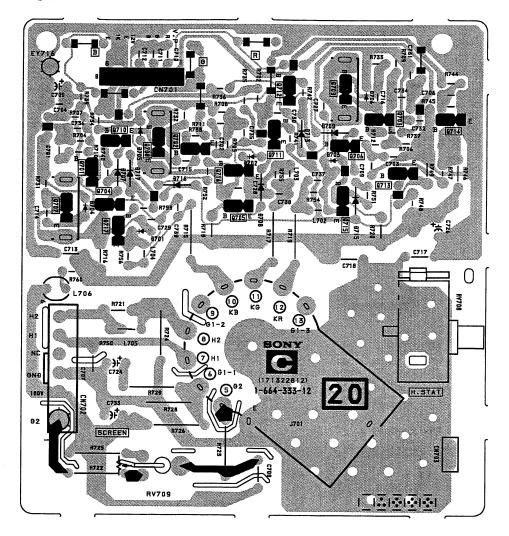
# C BOARD WAVEFORMS (20inch)

①	2	2	2 , ,	3
	Վխում	ՎԽու		77
25.0Vp-p (H)	PAL 70.0Vp-p (H)	NTSC3.58, 4.43 63.0Vp-p (H)	ANALOG RGB 80.0Vp-p (H)	PAL 78.0Vp-p (∺)
3	3 n n	4	4	4
\ \J\ \_\\\	بيارسيار ا	וטקטקט	וטקוטקוט	ן מומומו
NTSC3.58, 4.43 70.0Vp-p (H)	S-VIDEO 88.0Vp-p (H) ANALOG RGB 90.0Vp-p (H)	PAL 89.0Vp-p (H)	NTSC3.58, 4.43 82.0Vp-p (H)	s-video 100Vp-p (H) ANALOG RGB 102Vp-p (H)

6-50

[R.G.B OUT]

# - C BOARD -

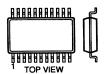


R740

P707 R707

### 6-5. SEMICONDUCTORS

ADM232LAR-REEL XRU4021BF XRU4053BCF



16pin SOP

AN5265



AT24C02-10PC ST24C01FM6TR ST24C02FB6



8pin DIP

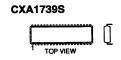
BA10324AF LM324DR MC14024BF MC14066BF MC14584BF MC74HC86F XRU4066BCF

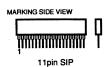


14pin SOP

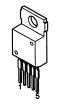
BA4558F CXA1211M LM358D MM1111XF MM1111XFBE MM1113XFB MM1114XFBE ST24C02FM6TR XRA10393F







MC14052BF MC14538BF



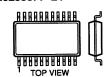
MC14094BF



M51279FP



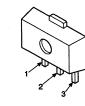
M62358FP-E1



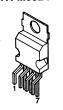
24pin SOP



S-80743AL-A7-S



STR-M6524



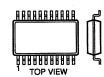
STR-S3115



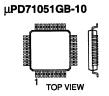
9pin ZIP



μPD6451AGT-632-E2



20pin SOP

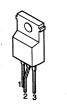


44pin QFP

μPD78P018FYCW



**XRA17812T** 



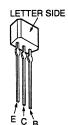
Z8622812PSC



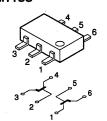
DTA144EKA-T146 DTC124EKA-T146

DTC144EKA-T146 2SA1037K-T-146-Q 2SA1162-G 2SB709A-R 2SC1623-L5L6 2SC2412K-T-146-QR 2SC2412K-T-146-S 2SD601A-S

DTC114ESA 2SC2785-HFE



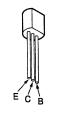
IMT1US



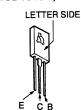
IMX1



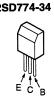
2SA1091-0 2SC2551-0



2SA1220A 2SC2611 2SC688-LK 2SC2690A-Q 2SC3271F-N 2SD1640Q 2SD1640Q, R



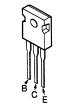
2SC2958 2SD774-34



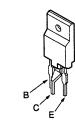
2SC3851-G 2SD2396K



2SD1210 (LK)



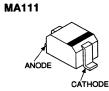
2SD1878-CA



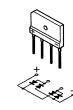
2SK94 2SK94-X2X3X4



DTZ-TT11-11B DTZ-TT11-13C DTZ-TT11-5.6B DTZ-TT11-6.2 DTZ11B DTZ13C DTZ5.6B DTZ6.2



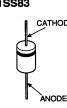
D4SB60L



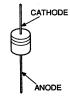
D5L60 FMB-G16L FML-G12S



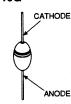
EGP20G EL1Z ERD07-15 RGP02-17EL-6433 RGP10GPKG23 RGP15J-6040 **RGP15K-6179** UF5406 10E2 1SS83



**ERA15-06** RD16ES-B2 RD16ES-B3 RD20ES-B2 **1SS119-25** 1SS133T-77



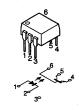
ERC38-06 V19E V19G



MA151WK 1SS184



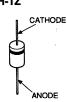
PC111YS



RD10SB1



RH-1A RH-1Z



**1SS226** 



1SV230TPH3 1SV232-TPH3



**1S2835** 152836



**SEL4410E-D** SLP281C-50 TLG123A **TLY123** 



2SA1220A 2SC2611 2SC688-LK 2SC2690A-Q 2SC3271F-N 2SD1640Q 2SD1640Q, R

LETTER SIDE



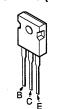
2SC2958 2SD774-34



2SC3851-G 2SD2396K



2SD1210 (LK)



2SD1878-CA



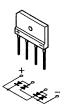
2SK94 2SK94-X2X3X4



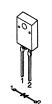
DTZ-TT11-11B
DTZ-TT11-13C
DTZ-TT11-5.6B
DTZ-TT11-6.2
DTZ11B
DTZ13C
DTZ5.6B
DTZ6.2
MA111



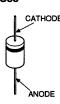
D4SB60L



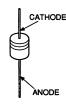
D5L60 FMB-G16L FML-G12S



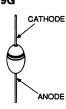
EGP20G EL1Z ERD07-15 RGP02-17EL-6433 RGP10GPKG23 RGP15J-6040 RGP15K-6179 UF5406 10E2 1SS83



ERA15-06 RD16ES-B2 RD16ES-B3 RD20ES-B2 1SS119-25 1SS133T-77



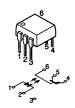
ERC38-06 V19E V19G



MA151WK 1SS184



PC111YS



RD10SB1



RH-1A RH-1Z



**1SS226** 



1SV230TPH3 1SV232-TPH3



1S2835 1S2836



SEL4410E-D SLP281C-50 TLG123A TLY123



# SECTION 7 EXPLODED VIEWS

 The construction parts of an assembled part are indicated with a collation number in the remark column.

 Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items. The components identified by shading and mark ∆ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specífie.

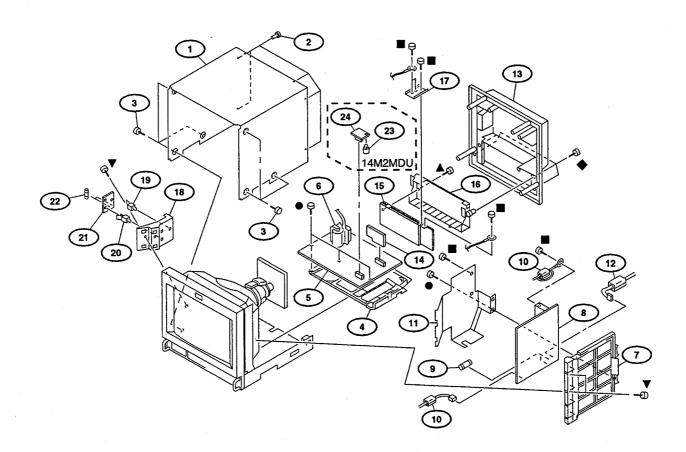
### 7-1. CHASSIS [14M2MDU/E/A]

• Items with no part number and no description are not stocked because they

are seldom required for routine service.

NOTE:

●: 7-685-648-79 +BVTP 3X12 ■: 7-682-661-01 +PS 4X8 ▲: 7-685-646-79 +BVTP 3X8 ◆: 7-685-663-79 +BVTP 4X16 ▼: 7-685-881-09 +BVTT 4X8



REF. NO	D. PART NO.	DESCRIPTION	REMARK	REF. NO	PART NO.	DESCRIPTION	REMARK
1	X-4035-200-2	COVER ASSY, TOP		13		COVER, REAR	
õ		RIVET, NYLON		14	* A-1304-141-A	M BOARD, COMPLETE	
3		SCREW (OS), CASE, CLAW		15	1-537-877-21	TERMINAL BOARD ASSY, I/O	
Ă							
		A BOARD, COMPLETE		16	4-043-688-81	PANEL, CONNECTOR	
3	71-12/0 2/0 71	1. 201112, 00112		17	* 4-058-363-01	TERMINAL, EARTH	
6	A 1.453.933.11	TRANSFORMER ASSY, FLYBAC	'K		* 4-391-842-06	BRACKET, HVR	
7		BRACKET, G	***************************************	19	* 4-321-929-00	HOLDER, PC BOARD	
Ŕ		G BOARD, COMPLETE			* 3-703-141-00	HOLDER, PWB	
Ğ	A 1.576.731.11	FUSE (H.B.C.) 4A/250V					
9 10	1-543-827-11	CLAMP, SLEEVE FERRITE		21	* A-1316-350-A	GA BOARD, COMPLETE	·
10	1 5 45 027 11	01.1.1.1., 0222.1.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2				FUSE, GLASS TUBE 1.6A/125V	
11	* 4-062-488-01	SHIELD, G PWB		23	* 3-687-542-41	SPACER, PC BOARD SPACE (14	M2MDU)
12	1-543-653-11	CORE ASSY, BEAD(DIVISION T	YPE)	24	* A-1390-779-A	S BOARD, COMPLETE (14M2MI	OU)
12	1-343-033-11	CORE MODI, DEMECRICA	1120)	,	11 1070 117 11		•

# 7-2. PICTURE TUBE [14M2MDU/E/A]

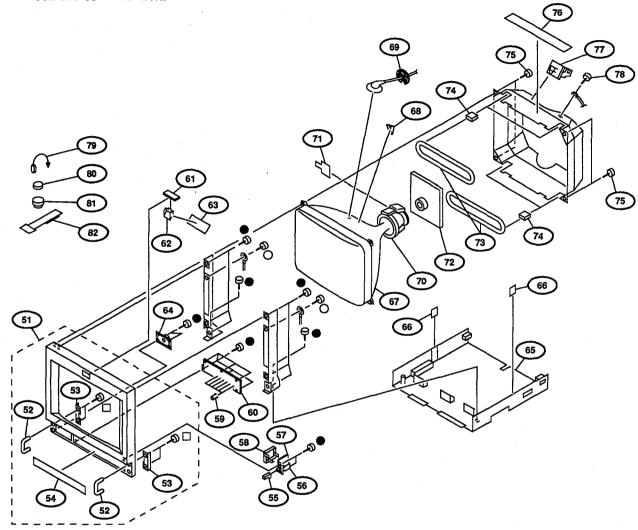
• : 7-685-648-79 O: 7-682-648-09 +BVTP 3X12 +PS 3X8

□ : 7-682-563-09

+B 4X12

The components identified by shading and mark ∆ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque ∆ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie



RE	F. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
5	1	X-4035-199-1	BEZEL ASSY	52-54	67 A	8-738-342-05	PICTURE TUBE 14MG(D/	RKY/M34KBFITX)
. 5	2	4-052-200-11	HANDLE, PROTECTOR		68	3-703-961-01	SPACER, DY	
5	3 *	4-043-679-01	REINFORCEMENT, HANDLE		69		HOLDER, HV CABLE	
5	4 *	4-057-975-41	LABEL, CONTROL		70 A		DEFLECTION YOKE Y14	MGAT
5:	5	4-043-683-01	BUTTOM, POWER SWITCH		***************************************	•		
					71	X-2105-533-1	PLATE ASSY, CORRECTI	ON, TLH
			SWITCH, PUSH (A.C. POWER)		72 *	A-1331-764-A	C BOARD, COMPLETE	
5			J BOARD, COMPLETE				COIL, DEMAGNETIZATION	ON
51 51	8		COVER, AC SWITCH			4-316-015-00	HOLDER, WIRE	
		4-043-802-11	KNOB, CONTROL		75	4-365-808-01	SCREW (5), TAPPING	
6	) *	A-1372-410-A	H BOARD, COMPLETE					
_					76	4-391-833-01	CLOTH, PROTECTION	
6			X BOARD, COMPLETE		77	4-033-681-01	HOLDER, LEAD	
6			REFLECTOR, LED		78	4-389-025-01	SCREW (M4) (EXT TOOT)	H WASHER)
6			CUSHION, TALLY		79	4-308-870-00	CLIP, LEAD WIRE	
6		1-544-063-12	SPEAKER		80	1-452-032-00	MAGNET,DISK; 10mmø	
6.	5	X-4031-711-1	CABINET ASSY, BOTTOM					
	_	12.2			81		MAGNET, ROTATABLE I	
6	5	4-042-608-01	NUT, PLATE		82	4-051-736-21	PIECE A(90), CONV. COR	RECT

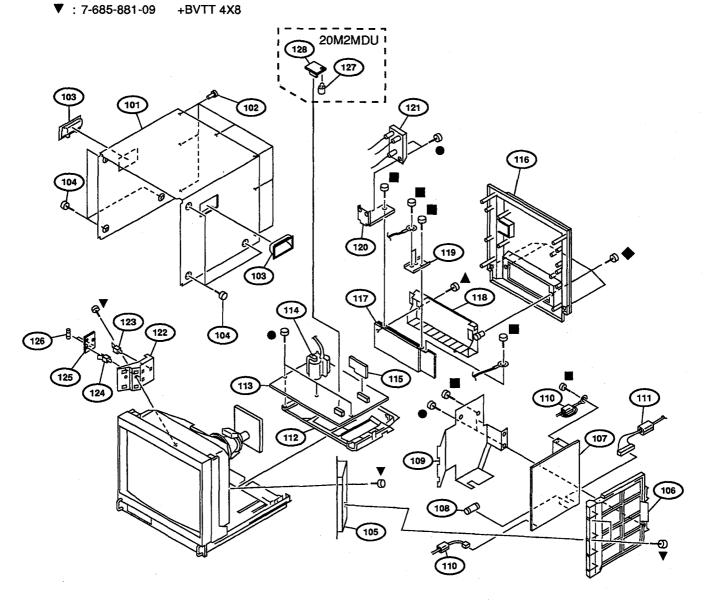
### 7-3. CHASSIS [20M2MDU/E/A]

T-685-648-79
 PS 4X8
 7-685-646-79
 17-685-646-79
 7-685-663-79
 BVTP 3X12
 +PS 4X8
 +BVTP 3X8
 +BVTP 4X16

The components identified by shading and mark \(\Lambda\) are critical for safety.

Replace only with part number specified.

Les composants identifies par une trame et une marque \( \Lambda\) sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

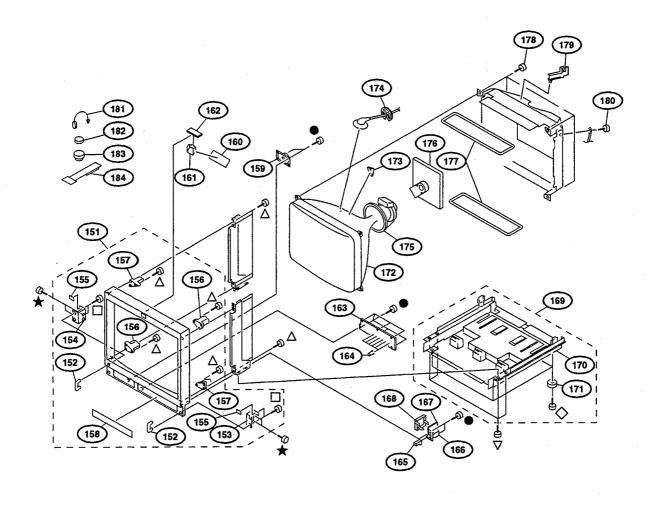


REF. N	O. PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
						•	
101	4-057-973-41	COVER, TOP		116	4-043-677-11	COVER, REAR	
102	4-391-825-01	RIVET, NYLON		117	1-537-877-21	TERMINAL BOARD ASSY, I	<b>O</b>
103	4-043-825-11	HANDLE	i	118	4-043-688-81	PANEL, CONNECTOR	
104	4-847-802-11	SCREW (OS), CASE, CLAV	V	119 *	4-058-363-01	TERMINAL, EARTH	
105	X-4391-825-1	HOOK ASSY, F		120	4-057-971-01	BRACKET, FOCUS VOLUME	3
106	* 4-043-689-01	BRACKET, G		121 🛆	1-238-368-11	RESISTOR ASSY, HIGH-VOL	.TAGE
107		G BOARD, COMPLETE			4-391-842-06	BRACKET, HVR	
108	<b>▲</b> 1-576-231-11	FUSE (H.B.C.) 4A/250V		123 *	4-321-929-00	HOLDER, PC BOARD	
109	* 4-062-488-01	SHIELD, G PWB			3-703-141-00	HOLDER, PWB	
110	1-543-827-11	CLAMP, SLEEVE FERRITI	3	125 *	A-1316-350-A	GA BOARD, COMPLETE	
111	1-543-653-11	CORE ASSY, BEAD(DIVIS	ION TYPE)	126 △∆	1-532-742-11	FUSE, GLASS TUBE 1.6A/12:	īV
112	* 4-043-690-01	BRACKET, MAIN	i			SPACER, PC BOARD SPACE	
113		A BOARD, COMPLETE		128 *	A-1390-779-A	S BOARD, COMPLETE (20M)	2MDU)
		TRANSFORMER ASSY, FI	YBACK				
115	* A-1304-141-A	M BOARD, COMPLETE					

# 7-4. PICTURE TUBE [20M2MDU/E/A]

 The components identified by shading and mark ∆ are critical for safety.

Replace only with part number specified. Les composants identifies par une trame et une marque ∆ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.



REF. N	O. PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
151 152 153 154	X-4035-198-1 4-052-200-11 * 4-043-670-01 * 4-043-669-01	BEZEL ASSY HANDLE, PROTECTOR REINFORCEMENT (R), HANDLE REINFORCEMENT (L), HANDLE	152-158	169 *	4-043-681-01 X-4032-770-1 4-043-674-03	COVER, AC SWITCH CABINET ASSY, BOTTOM CABINET, BOTTOM	170,171
155	* 4-043-797-01	PLATE, BLIND		171	4-901-947-01	LEG	\$ (\$ # #01#** 111 1 <b>\$</b>
156 157	* 4-043-672-01 * 4-043-673-01	BRACKET (A), PICTURE TUBE BRACKET (B), PICTURE TUBE		173 174	8-736-135-05 3-703-961-01 3-704-372-01	PICTURE TUBE 20FZ5(DARK SPACER, DY HOLDER, HV CABLE	
158 159	* 4-057-975-41 1-544-063-12	LABEL, CONTROL SPEAKER		***************************************	1-451-349-12	DEFLECTION YOKE (Y20FZ)	i)
160	4-044-606-01	CUSHION, TALLY		177 △	1-426-505-11		
161 162	* 4-043-671-01 * A-1390-778-A	REFLECTOR, LED X BOARD, COMPLETE			4-365-808-01 4-387-284-01	SCREW (5), TAPPING HOLDER, LEAD	
163 164	* A-1372-410-A 4-043-802-11	H BOARD, COMPLETE KNOB, CONTROL		180	4-389-025-01	SCREW (M4) (EXT TOOTH W	'ASHER)
165	4-043-683-01	BUTTOM, POWER SWITCH		181 182	4-308-870-00 1-452-032-00	CLIP, LEAD WIRE MAGNET, DISK; 10mmø	
166 167		J BOARD, COMPLETE		183 184	1-452-094-00 4-051-736-21	MAGNET, ROTATABLE DISK PIECE A(90), CONV. CORREC	

# **SECTION 8 ELECTRICAL PARTS LIST**



NOTE:

Les composants identifies par une trame et une marque 🛆 sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and mark A are critical for safety. Replace only with part number specified.

- The components identified by M in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

 CAPACITORS PF: μμ F

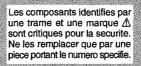
• There are some cases the reference number on one board overlaps on the other board. Therefore, when ordering parts by the reference number, please include the board name.

When indicating parts by reference number,

please include the board name.

- · All resistors are in ohms

• F : nonflammable										
REF. NO	PART NO.	DESCRIPTION	R	REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
	* A-1298-296-A	A BOARD, COMPLETE (1	l4inch m	odel)	C174 C200	1-163-243-11 1-126-963-11	CERAMIC CHIP ELECT	47PF 4.7MF	5% 20%	50V 50V
	* 4-043-994-01 * 4-058-301-01 4-382-854-11	SOCKET, IC PLATE (CF), SHIELD RING, SHORT SCREW (M3X10), P, SW (+ SCREW +PSW 3X8	)		C201 C202 C203 C204 C205	1-137-353-11 1-163-017-00 1-126-963-11 1-126-964-11 1-126-767-11	CERAMIC CHIP ELECT ELECT	0.047MF 0.0047MF 4.7MF 10MF 1000MF	10% 10% 20% 20% 20%	100V 50V 50V 50V 16V
	7-685-663-79	SCREW +BVTP 4X16 TYPE <band filter="" pass=""></band>	E2 IT-3		C206 C207 C208 C209	1-128-526-11 1-104-665-11 1-126-964-11 1-126-963-11	ELECT ELECT	100MF 100MF 10MF 4.7MF	20% 20% 20% 20%	25V 25V 50V 50V
DDE400	1 026 262 11	FILTER, BAND PASS			C304	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
BPF400	1-163-251-11	<capacitor> CERAMIC CHIP 100PF</capacitor>	5%	50V	C305 C306 C310 C311 C312	1-163-031-11 1-164-004-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP ELECT	0.01MF 0.1MF	5% 10% 10% 20%	50V 50V 25V 25V 50V
C106 C114 C116 C117	1-163-031-11 1-163-031-11 1-163-031-11	CERAMIC CHIP 100PF CERAMIC CHIP 0.01MF CERAMIC CHIP 0.01MF CERAMIC CHIP 0.01MF	5% 5%	50V 50V 50V 50V	C313 C314 C315 C316 C318		ELECT		5% 5% 20% 20% 20%	50V 50V 50V 25V 50V
C119 C121 C123 C124	1-165-319-11 1-163-237-11 1-165-319-11 1-163-251-11	CERAMIC CHIP 0.1MF CERAMIC CHIP 27PF CERAMIC CHIP 0.1MF CERAMIC CHIP 100PF	5% 5%	50V 50V 50V 50V	C325 C328 C340 C343	1-126-964-11 1-163-031-11 1-163-031-11 1-163-031-11	ELECT CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	10MF 0.01MF 0.01MF 0.01MF	20%	50V 50V 50V 50V
C132 C133 C134 C135 C136	1-163-251-11 1-163-251-11 1-163-251-11 1-163-251-11	CERAMIC CHIP 0.001MF CERAMIC CHIP 100PF CERAMIC CHIP 100PF CERAMIC CHIP 100PF CERAMIC CHIP 100PF CERAMIC CHIP 0.1MF	5% 5% 5% 5% 5%	50V 50V 50V 50V 50V 50V	C349 C350 C352 C353 C354 C355	1-163-141-00 1-163-031-11 1-165-319-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP ELECT	0.001MF 0.01MF 0.1MF	5% 5% 5% 20%	50V 50V 50V 50V 50V 50V
C141 C142 C143 C144	1-164-161-11 1-163-259-91 1-165-319-11 1-165-319-11	CERAMIC CHIP 0.0022MF CERAMIC CHIP 220PF CERAMIC CHIP 0.1MF CERAMIC CHIP 0.1MF CERAMIC CHIP 0.1MF		50V 50V 50V 50V 50V	C356 C357 C358 C359 C360	1-126-963-11 1-163-031-11 1-163-031-11 1-104-664-11	ELECT CERAMIC CHIP CERAMIC CHIP	0.01MF 47MF	20% 20% 10%	50V 50V 50V 25V 50V
C154 C155 C156 C157	1-163-037-11 1-163-023-00 1-163-019-00 1-163-019-00	CERAMIC CHIP 0.022MF CERAMIC CHIP 0.015MF CERAMIC CHIP 0.0068MF CERAMIC CHIP 0.0068MF	10% 10%	50V 50V 50V 50V	C361 C362 C363 C364	1-163-031-11 1-163-031-11 1-163-099-00	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	0.01MF 0.01MF 18PF	5% 10%	50V 50V 50V 50V 100V
C158 C159 C161 C162 C164	1-164-344-11 1-104-664-11 1-163-141-00	CERAMIC CHIP 0.047MF CERAMIC CHIP 0.068MF ELECT 47MF CERAMIC CHIP 0.001MF CERAMIC CHIP 0.1MF	10% 10% 20% 5%	25V 25V 25V 50V 50V	C365 C366 C367 C368 C369	1-163-031-11 1-163-031-11 1-124-261-00	CERAMIC CHIP CERAMIC CHIP	0.01MF 0.01MF 10MF	20% 10%	50V 50V 50V 25V
C165 C166 C167 C168 C169	1-164-004-11 1-126-925-11 1-126-925-11		10% 20% 20% 10%	50V 25V 10V 10V 50V	C370 C371 C372 C373	1-104-664-11 1-104-664-11 1-163-031-11 1-163-141-00	ELECT CERAMIC CHIP CERAMIC CHIP	47MF 47MF 0.01MF 0.001MF	<ul><li>20%</li><li>20%</li><li>5%</li></ul>	25V 25V 50V 50V
C171 C172 C173	1-163-251-11 1-163-123-00	CERAMIC CHIP 100PF CERAMIC CHIP 180PF CERAMIC CHIP 180PF	5% 5% 5%	50V 50V 50V	C374 C375 C376	1-126-960-11 1-163-259-91 1-126-959-11	CERAMIC CHIP	1MF 220PF 0.47MF	20% 5% 20%	50V 50V 50V



DESCRIPTION

REF. NO. PART NO.

The components identified by shading and mark △ are critical for safety.
Replace only with part number specified.

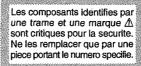
REMARK

REF. NO.	PART NO.	DESCRIPTION		<u>F</u>	EMARK
C377 C378 C379 C380	1-163-809-11 1-163-809-11 1-163-031-11 1-126-767-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP ELECT	0.047MF	10% 10% 20%	25V 25V 50V 16V
C381 C382 C383 C384 C385	1-163-031-11 1-163-243-11 1-104-664-11 1-163-249-11 1-104-664-11	CERAMIC CHIP CERAMIC CHIP ELECT CERAMIC CHIP ELECT	47PF 47MF	5% 20% 5% 20%	50V 50V 25V 50V 25V
C386 C387 C388 C390 C391	1-124-261-00 1-163-141-00 1-124-261-00 1-163-243-11 1-104-664-11	CERAMIC CHIP	10MF	20% 5% 20% 5% 20%	50V 50V 50V 50V 25V
C392 C393 C394 C395 C396	1-164-298-11 1-164-298-11 1-104-664-11 1-163-235-11 1-164-299-11	CERAMIC CHIP CERAMIC CHIP ELECT CERAMIC CHIP CERAMIC CHIP	0.15MF 47MF 22PF	10% 10% 20% 5% 10%	25V 25V 25V 50V 25V
C397 C398 C399 C400 C401	1-104-664-11 1-104-664-11 1-104-664-11 1-164-004-11 1-164-346-11	ELECT ELECT ELECT CERAMIC CHIP CERAMIC CHIP		20% 20% 20% 10%	25V 25V 25V 25V 16V
C407 C409 C411 C414 C415	1-164-004-11	ELECT CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP ELECT	0.1MF	20% 10% 20%	25V 50V 25V 50V 50V
C416 C417 C418 C419 C420	1-164-232-11 1-164-232-11 1-164-182-11 1-126-925-11 1-163-809-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP ELECT CERAMIC CHIP	0.01MF 0.0033MF 470MF	10% 10% 10% 20% 10%	50V 50V 50V 10V 25V
C421 C422 C423 C424 C426	1-164-222-11 1-126-960-11 1-163-809-11 1-163-809-11 1-163-243-11	CERAMIC CHIP ELECT CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	1MF 0.047MF 0.047MF	20% 10% 10% 5%	25V 50V 25V 25V 50V
C427 C429 C430 C431 C433	1-163-031-11 1-163-031-11 1-104-661-91 1-165-319-11 1-163-235-11	CERAMIC CHIP CERAMIC CHIP ELECT CERAMIC CHIP CERAMIC CHIP	0.01MF 330MF 0.1MF	20% 5%	50V 50V 16V 50V 50V
C434 C435 C437 C439 C440	1-163-089-00	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	6PF 0.1MF 0.047MF	10% 0.25PF 10% 10% 10%	25V 50V 25V 25V 25V
C441 C442 C443 C444 C446	1-126-962-11 1-163-809-11 1-163-243-11 1-165-319-11 1-163-089-00	ELECT CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	47PF 0.1MF	20% 10% 5% 0.25PF	50V 25V 50V 50V 50V
C447 C448 C449 C450 C451	1-163-263-11 1-163-243-11 1-163-227-11 1-163-809-11 1-164-004-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	47PF 10PF 0.047MF	5% 5% 0.5PF 10% 10%	50V 50V 50V 25V 25V
C452 C453 C454 C455 C456	1-163-263-11 1-164-004-11 1-163-243-11 1-163-263-11 1-163-089-00	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	0.1MF 47PF 330PF	5% 10% 5% 5% 0.25PF	50V 25V 50V 50V 50V
C457 C458 C459 C460 C461	1-163-249-11 1-165-319-11 1-164-004-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	82PF 0.1MF 0.1MF	10% 5% 10% 5%	25V 50V 50V 25V 50V

KEF. NO.	PART NO.	DESCRIPTION			EWAKK
C462 C463 C464 C465 C466	1-164-004-11 1-164-299-11 1-163-231-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	0.1MF 0.22MF 15PF	10% 10% 10% 5% 5%	25V 25V 25V 50V 50V
C467 C469 C470 C471 C472	1-163-037-11 1-163-243-11 1-163-105-00	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	0.022MF 47PF 33PF	5% 10% 5% 5%	50V 50V 50V 50V 50V
C473 C475 C476 C477 C478	1-163-031-11 1-163-031-11	CERAMIC CHIP CERAMIC CHIP	0.01MF 0.01MF	10% 20%	50V 50V 50V 25V 50V
C479 C483 C484 C485 C486	1-163-249-11 1-163-113-00 1-163-113-00	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	82PF 68PF 68PF	5% 5% 5% 5% 5%	50V 50V 50V 50V 50V
C487 C490 C491 C492 C493	1-164-336-11 1-164-336-11 1-164-336-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	0.33MF 0.33MF 0.33MF	5% 10%	50V 25V 25V 25V 25V 50V
C494 C495 C496 C497 C498	1-126-964-11 1-163-249-11	CERAMIC CHIP CERAMIC CHIP	10MF 82PF	20% 5% 10% 20%	25V 50V 50V 50V 50V
C499 C500 C501 C502 C503	1-164-004-11 1-164-182-11 1-163-141-00	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	0.1MF 0.0033MF 0.001MF	10% 10% 5% 5%	50V 25V 50V 50V 50V
C504 C505 C506 C507 C508	1-126-959-11	CERAMIC CHIP ELECT ELECT	0.068MF 560PF 0.47MF 100MF 0.15MF	5% 5% 20% 20% 5%	50V 50V 50V 25V 50V
C509 C511 C512 C513 C514 Z	1-128-566-11 1-107-368-11 1-126-959-11 1-124-261-00 1-130-338-91	FILM ELECT ELECT	470MF 0.047MF 0.47MF 10MF 0.01MF	20% 10% 20% 20% 5%	100V 200V 50V 50V 630V
C515 C516 C517 C518 C519	1-102-030-00 1-163-024-00 1-107-947-11	CERAMIC CHIP CERAMIC CERAMIC CHIP ELECT CERAMIC CHIP	330PF 0.018MF 220MF	10% 10% 10% 20% 10%	25V 500V 50V 160V 50V
C520 C521 C522 C523 C525	1-163-257-11 1-162-114-00 1-126-768-11 1-107-902-11 \$\Lambda\$1-136-079-11	CERAMIC CHIP CERAMIC ELECT ELECT FILM	180PF 0.0047MF 2200MF 1MF 0.01MF	5% 20% 20% 3%	50V 2KV 16V 50V 2KV
	<u> </u>		680PF	10%	2KV
C527 C529		CERAMIC ELECT	470PF 0.47MF	10% 20%	2KV 50V
C530 C531	1-104-666-11 1-104-664-11	ELECT ELECT	220MF 47MF	20% 20%	25V 25V
C532 C533 C534 C537 C538	1-163-031-11 1-102-212-00 1-107-662-11 1-126-971-11 1-137-150-11		0.01MF 820PF 22MF 470MF 0.01MF	10% 20% 20% 10%	50V 500V 250V 50V 100V
C539 C540 C541 C542	1-107-905-11	CERAMIC CHIP	0.0056MF 470PF 4.7MF 0.0022MF	5% 5% 20% 10%	50V 50V 50V 100V



REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION		R	EMARK
C543	1-136-481-11	MYLAR	0.0022MF	10%	100V	C1321 C1322	1-104-664-11 1-126-934-11		47MF 220MF	20% 20%	25V 16V
C544 C545	1-137-150-11 1-102-212-00		0.01MF 820PF	10% 10%	100V 500V	C1323		CERAMIC CHIP		2070	50V
C546 C547 C548	1-163-119-00	CERAMIC CHIP CERAMIC CERAMIC	120PF 100PF 820PF	5% 5% 10% 20%	50V 50V 500V	C1324 C1325 C1326 C1327	1-163-031-11 1-104-664-11 1-163-031-11	CERAMIC CHIP CERAMIC CHIP ELECT CERAMIC CHIP CERAMIC CHIP	0.01MF 47MF 0.01MF	20%	50V 50V 25V 50V 50V
C549 C550 C551	1-107-906-11 1-107-905-11 1-106-375-12	ELECT	4.7MF 0.022MF	20% 10%	50V 100V	C1328 C1329	1-103-031-11		10MF	20%	50V
C552 C554	1-107-889-11 1-130-736-11 1-126-964-11	ELECT FILM	220MF 0.01MF	20% 5% 20%	25V 50V	C1330 C1331 C1332 C1333	1-163-031-11 1-104-664-11 1-104-664-11 1-104-664-11	CERAMIC CHIP ELECT ELECT		20% 20% 20%	50V 25V 25V 25V
C555 C556 C557 C558 C559	1-126-964-11 1-126-964-11 1-126-960-11 1-136-173-00	ELECT MYLAR ELECT	10MF	20% 10% 20% 5%	50V 100V 50V 50V	C1334 C1335 C1336	1-163-227-11 1-104-664-11 1-104-664-11	CERAMIC CHIP ELECT ELECT	10PF 47MF 47MF	0.5PF 20% 20%	50V 25V 25V
C561	1-136-159-00		0.033MF 10MF	5% 20%	50V 50V	C1338 C1339		CERAMIC CHIP CERAMIC CHIP			50V 50V
C564 C565 C566 C567	1-126-964-11 1-126-960-11 1-137-150-11 1-136-499-11	ELECT MYLAR	1MF 0.01MF 0.047MF	20% 20% 10% 5%	50V 100V 50V	C1340 C1341 C1342 C1343	1-163-275-11 1-163-105-00	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	0.001MF 33PF	5% 5% 5%	50V 50V 50V 50V
C568 C569		TANTALUM	1MF 4.7MF	20% 10%	50V 25V	C1344		CERAMIC CHIP		0.25PF	50V
C570 C571 C572	1-126-767-11 1-163-022-00 1-104-709-11	CERAMIC CHIP	4.7 <b>MF</b>	20% 10% 0	16V 50V 160V	C1345 C1346 C1347 C1348	1-163-127-00	ELECT CERAMIC CHIP CERAMIC CHIP	270PF	20% 20% 5%	50V 16V 50V 50V
C573 C576	1-136-173-00 1-102-244-00	CERAMIC	0.47MF 220PF 10MF	5% 10% 20%	50V 500V 50V	C1349		CERAMIC CHIP		5%	50V 50V
C577 C578 C579	1-107-906-11 1-136-112-00 1-107-910-11	FILM	1.4MF 100MF	5% 20%	200V 50V	C1350 C1351 C1352 C1353	1-126-160-11 1-163-023-00	CERAMIC CHIP ELECT CERAMIC CHIP CERAMIC CHIP	1MF 0.015MF	10% 20% 10%	50V 50V 50V
C580 C581	1-136-756-11 1-126-963-11	ELECT	0.24MF 4.7MF	5% 20%	200V 50V	C1354	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C582 C583 C584	1-102-002-00 1-136-828-11 1-107-949-11	FILM	680PF 1.8MF 2.2MF	10% 5% 20%	500V 200V 160V	C1355 C1356 C1357 C1358	1-163-259-91 1-163-235-11 1-104-661-91 1-124-589-11		220PF 22PF 330MF 47MF	5% 5% 20% 20%	50V 50V 16V 16V
C585 C586	1-107-960-11 1-126-942-61	ELECT	4.7MF 1000MF	20% 20%	250V 25V	C1359		CERAMIC CHIP		5%	50V
C587 C588 C589	1-102-030-00 1-107-906-11 1-102-030-00	ELECT	330PF 10MF 330PF	10% 20% 10%	500V 50V 500V	C1360 C1362 C1363 C1364	1-163-249-11 1-163-235-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	82PF 22PF	10% 5% 5% 5%	50V 50V 50V 50V
C590 C591	1-107-903-11 1-107-365-11	FILM		20% 10%	50V 200V	C1365	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C592 C593 C594	1-107-635-11 1-165-319-11 1-163-229-11	ELECT CERAMIC CHIP CERAMIC CHIP	4.7MF 0.1MF 12PF	20% 5%	160V 50V 50V	C1366 C1367 C1372 C1373	1-104-664-11 1-104-664-11 1-104-664-11 1-104-664-11	ELECT ELECT	47MF 47MF 47MF 47MF	20% 20% 20% 20%	25V 25V 25V 25V
C595 C596	1-107-889-11 1-104-665-11	ELECT ELECT	220MF 100MF	20% 20%	25V 25V	C1374	1-104-664-11		47MF	20%	25V
C597 C598 C599	1-164-346-11	CERAMIC CHIP CERAMIC CHIP		20%	16V 16V 50V	C1375 C1378 C1391 C1394	1-126-963-11 1-163-231-11 1-136-165-00 1-126-967-11	CERAMIC CHIP FILM	4.7MF 15PF 0.1MF 47MF	20% 5% 5% 20%	50V 50V 50V 50V
C1300 C1302	1-104-664-11 1-163-133-00	ELECT CERAMIC CHIP	47MF 470PF	20% 5%	25V 50V	C1395	1-126-967-11	ELECT	47MF	20%	50V
C1304 C1305 C1307	1-104-664-11 1-104-664-11	ELECT	47MF 47MF	20% 20%	25V 25V 50V	C1396 C1397 C1398 C1399				5% 20% 20%	50V 50V 16V 25V
C1308 C1309	1-126-933-11 1-163-257-11	ELECT CERAMIC CHIP	100MF 180PF	20% 5%	10V 50V	C1400	1-163-031-11	CERAMIC CHIP		2070	50V
C1311 C1312 C1313	1-104-664-11 1-163-031-11		47MF 0.01MF	20%	25V 50V 50V	C1401 C1402 C1403 C1404	1-136-173-00	CERAMIC CHIP	0.47MF	5% 5% 10%	50V 50V 50V 25V
C1314 C1315	1-104-664-11 1-104-664-11	ELECT	47MF 47MF	20% 20%	25V 25V	C1408	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C1316 C1317 C1318		CERAMIC CHIP ELECT	0.01MF 47MF 47MF	20% 20%	50V 25V 25V	C1500 C1501 C1505	1-126-768-11 1-126-925-11 1-136-165-00	ELECT FILM	2200MF 470MF 0.1MF 330MF	20% 20% 5% 20%	16V 10V 50V 16V
C1319 C1320	1-124-234-00 1-104-664-11		22MF 47MF	20% 20%	16V 25V	C1506 C1507	1-104-661-91 1-163-141-00	CERAMIC CHIP		5%	50V



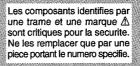
The components identified by shading and mark △ are critical for safety.
Replace only with part number specified.

Γ	Δ	
1		V

REF. NO.	PART NO.	DESCRIPTION		REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C1508 C1509	1-126-963-11 1-126-964-11 1-126-963-11	ELECT 10MF	20% 20% 20%	50V 50V 50V	D304 D305		DIODE 1SS184 DIODE 1SS226	
C1510 C1511 C1512		CERAMIC CHIP 0.01MF	10% 20%	50V 50V	D307 D308 D309	8-719-404-49	DIODE MA111 DIODE MA111 DIODE MA111	
C1513 C1514 C1515	1-163-197-00 1-130-477-00 1-126-964-11		5% 5% 20%	50V 50V 50V	D310 D311	8-719-104-34	DIODE 1S2836 DIODE 1SV230TPH3	
C1516 C1517		CERAMIC CHIP 0.022MF	10% 20%	50V 10V	D313 D314 D315	8-719-404-49	DIODE 1SS184 DIODE MA111	
C1518 C1521 C1530		ELECT 47MF CERAMIC CHIP 47PF CERAMIC CHIP 0.01MF	20% 5%	16V 50V 50V	D317 D320	8-719-404-49	DIODE MA111 DIODE MA111 DIODE MA111	
C1538 C1539	1-163-251-11	CERAMIC CHIP 100PF CERAMIC CHIP 120PF	5% 5%	50V 50V	D322 D323 D324	8-719-404-49	DIODE MA111 DIODE MA111 DIODE MA111	
C1540 C1541 C1542	1-163-121-00	CERAMIC CHIP 330PF CERAMIC CHIP 150PF CERAMIC CHIP 150PF	5% 5% 5%	50V 50V 50V	D325 D326	8-719-801-78	DIODE 1SS184 DIODE MA111	
C2501 C2502	1-164-232-11	CERAMIC CHIP 0.01MF CERAMIC CHIP 0.01MF	10% 10%	50V 50V	D327 D332 D333	8-719-404-49	DIODE 1S2836 DIODE MA111 DIODE MA111	
C2510	<b>∆</b> 1-130-061-91	FILM 0.0015MF	5%	630V	D335 D337	8-719-404-49	DIODE MA111 DIODE MA111	·
CN101	* 1-573-979-11	<connector> CONNECTOR, BOARD TO</connector>	BOAR	D 11P	D338 D339 D344	8-719-404-49	DIODE MA111 DIODE MA111 DIODE 1SS184	
CN102 CN104 CN105	* 1-564-506-11	PLUG, CONNECTOR 11P PLUG, CONNECTOR 3P CONNECTOR, BOARD TO	BOAR	D 12P	D345 D346	8-719-104-34	DIODE 1S2836 DIODE 1S2836	
CN201 CN301	* 1-564-514-11	PLUG, CONNECTOR 3P PLUG, CONNECTOR 11P			D347 D360 D361	8-719-104-34 1-216-295-91 1-216-295-91		
CN302 CN305 CN306	1-779-070-21 * 1-564-506-11	PLUG, CONNECTOR 7P PIN, CONNECTOR 12P PLUG, CONNECTOR 3P			D362 D363	8-719-158-40	DIODE RD10SB1 DIODE RD10SB1	
CN401 CN402	* 1-564-515-11	PLUG, CONNECTOR 8P  PLUG, CONNECTOR 12P  CONNECTOR DIN (DV) (P)			D364 D365 D381	8-719-404-49 8-719-404-49	DIODE 1S2836 DIODE MA111 DIODE MA111	
CN501 CN502 CN503	* 1-573-964-11 * 1-573-964-11	CONNECTOR PIN (DY) 6P PIN, CONNECTOR (PC BO. PIN, CONNECTOR (PC BO. PLUG, CONNECTOR 3P			D401 D404	8-719-800-76	DIODE 188226	
CN504 CN505 CN507	* 1-564-506-11	PLUG, CONNECTOR 3P TAB (CONTACT)			D405 D406 D407 D408	8-719-404-49 8-719-404-49	DIODE 1SS184 DIODE MA111 DIODE MA111 DIODE MA111	
C11507	1-055-515 11	<composition circuit<="" td=""><td>RI OC</td><td>к&gt;</td><td>D410 D411</td><td>8-719-404-49</td><td>DIODE MA111 DIODE MA111</td><td></td></composition>	RI OC	к>	D410 D411	8-719-404-49	DIODE MA111 DIODE MA111	
CP300 CP301		MODULE, TRAP MODULE, TRAP	BECC		D414 D415	8-719-801-78 8-719-801-78	DIODE ISS184 DIODE ISS184 DIODE ISS184	
CP302 CP303	1-808-654-21		B-4)		D416 D417 D418	8-719-801-78	DIODE 1SS184 DIODE 1SS184	
		<diode></diode>			D418 D421 D422 D423	8-719-404-49 8-719-404-49	DIODE MA111 DIODE MA111 DIODE 1SS226	
D100 D101 D102	8-719-800-76	DIODE MA111 DIODE 1SS226 DIODE 1SS226			D424 D425	8-719-404-49	DIODE 1SS226	
D103 D104	8-719-045-70	DIODE 1SV230TPH3 DIODE 1SS226		-	D423 D427 D500 D501	8-719-404-49 8-719-404-49	DIODE MA111 DIODE MA111 DIODE DTZ5.6B	
D105 D107 D108	8-719-800-76	DIODE 1SS226 DIODE 1SS226 DIODE 1S2836			D502 D503	8-719-979-80	DIODE UF5406 DIODE MA111	
D109 D111	8-719-801-78	DIODE 1SS184 DIODE DTZ6.2			D504 D505 D506	8-719-901-83 8-719-028-72	DIODE 1SS83 DIODE RGP02-17EL-6433 DIODE ERD07-15	
D114 D115 D116	8-719-977-05	DIODE MA111 DIODE DTZ6.2 DIODE MA111			D507 D508	8-719-800-76	DIODE 1SS226 DIODE 1SS226	•
D117 D200	8-719-920-76	DIODE 1S2076 DIODE DTZ13C			D510 D512 D513	8-719-302-43 8-719-979-80	DIODE EL1Z DIODE UF5406 DIODE MA111	
D300 D301 D303	8-719-404-49	DIODE 1SV232-TPH3 DIODE MA111 DIODE DTZ6.2			D514 D515	8-719-971-20	DIODE ERC38-06 DIODE ERC38-06	
2000		<del></del>		1	2313	5,27,7/120		



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
D516 D517 D518 D519	8-719-404-49 8-719-404-49	DIODE MA111 DIODE MA111 DIODE MA111 DIODE MA111		IC315 IC316 IC317 IC318 IC319	8-759-432-78 8-759-009-51 8-759-009-67	IC BU4053BCF IC MM1111XFBE IC MC14538BF IC MC14584BF IC MC14066BF	
D520 D521 D522 D523 D524	8-719-404-49 8-719-977-05 8-719-404-49	DIODE 1SS184 DIODE MA111 DIODE DTZ6.2 DIODE MA111 DIODE 10E-2		IC320 IC321 IC322 IC323 IC324	8-759-358-46 8-759-446-66 8-759-446-66 8-759-446-66	IC MM1114XFBE IC MM1113XFBE IC MM1113XFBE IC MM1113XFBE IC MM1113XFBE	
D525 D526 D527 D528 D529	8-719-404-49 8-719-200-02 8-719-300-76	DIODE 10E-2 DIODE MA111 DIODE 10E-2 DIODE RH-1A DIODE 10E-2		IC325 IC326 IC327 IC350 IC402	8-759-060-00 8-759-008-67 8-759-909-71	IC MM1113XFBE IC BA10324AF IC MC14066BF IC BA4558F IC CXA1211M	
D530 D531 D532 D533 D534	8-719-977-32 8-719-800-76 8-719-302-43	DIODE RH-1A DIODE DTZ11B DIODE 1SS226 DIODE EL1Z DIODE MA111		IC404 IC405 IC407 IC408 IC409	8-752-067-05 8-759-932-67 8-759-008-67 8-759-510-73	IC CXA1739S IC BU4053BCF IC MC14066BF IC BA10393F-E2 IC BA10324AF	
D535 D536 D538 D539 D540	8-719-800-76 8-719-800-76 8-719-404-49	DIODE MA111 DIODE 1SS226 DIODE 1SS226 DIODE MA111 DIODE MA111		IC410 IC411 IC412 IC413 IC500	8-759-009-06 8-759-008-92 8-759-932-67	IC MC14052BF IC MC14024BF IC BU4053BCF IC BU4053BCF	
D541 D543		DIODE 1SS184 DIODE MA111 <delay line=""></delay>		IC502 IC503 IC504 IC505	8-759-009-51 8-752-053-21	IC MC14538BF IC MC14538BF IC CXA1211M IC uPC7812AHF	
DL300 DL301 DL401	1-415-632-11	DELAY LINE, Y DELAY LINE, Y DELAY LINE		IC506 IC507 IC508 IC509	8-759-009-51 8-759-100-60 8-752-053-21 8-759-998-98	IC MC14538BF IC uPC1377C IC CXA1211M IC LM358D	
		<ferrite bead=""></ferrite>		IC510 IC513		IC MC14538BF IC MC14538BF	
FB501	1-410-396-41	FERRITE 0.45UH				<chip conductor=""></chip>	
FL300 FL401	1-236-547-11 1-236-364-11	<filter> TRAP, LC FILTER, BAND PASS</filter>		JR302 JR307 JR310	1-216-295-91 1-216-295-91 1-216-295-91	SHORT 0	
		10				<coil></coil>	
IC101 IC102 IC103 IC104 IC105	8-759-354-28 8-759-008-48 8-759-262-59	<ic><ic><ic td="" upd78p018fycw-md1<="">IC uPD78P018FYCW-MD1IC ST24C02FM6TRIC MC74HC86FIC uPD6451AGT-632-E2IC M62358FP-E1</ic></ic></ic>		L101 L102 L104 L105 L300	1-408-611-31 1-408-619-31 1-410-482-31	INDUCTOR 33UH INDUCTOR 47UH INDUCTOR 220UH INDUCTOR 100UH INDUCTOR 47UH	· •
IC106 IC107 IC108 IC109 IC110	8-759-196-70 8-759-196-70 8-759-042-02 8-759-196-70	IC M62358FP-E1 IC M62358FP-E1 IC S-80743AL-A7-S IC M62358FP-E1 IC M62358FP-E1		L305 L308 L309 L311 L312	1-410-466-41 1-410-470-11 1-410-470-11	INDUCTOR CHIP 2.2UH INDUCTOR 4.7UH INDUCTOR 10UH INDUCTOR 10UH INDUCTOR CHIP 27UH	
IC111 IC112 IC200 IC302 IC303	8-759-009-22 8-759-354-27 8-759-420-04 8-759-998-98	IC MC14094BF IC ST24C01FM6TR IC AN5265		L314 L316 L317 L319 L320	1-412-011-31 1-410-090-41 1-408-615-31	INDUCTOR CHIP 27UH INDUCTOR CHIP 27UH INDUCTOR 18mH INDUCTOR 100UH INDUCTOR 470UH	
IC304 IC305 IC306 IC307 IC309	8-759-932-67 8-759-631-08 8-759-358-46 8-759-008-67	IC BU4053BCF IC M51279FP IC MM1114XFBE IC MC14066BF IC MM1114XFBE		L401 L402 L403 L404 L405	1-410-216-31 1-410-216-31 1-410-216-31	INDUCTOR 47UH INDUCTOR CHIP 100UH INDUCTOR CHIP 100UH INDUCTOR CHIP 100UH INDUCTOR 68UH	
IC310 IC311 IC312 IC313 IC314	8-759-932-67 8-759-008-67 8-759-358-46 8-759-446-66	IC BU4053BCF IC MC14066BF IC MM1114XFBE IC MM1113XFBE IC MM1113XFBE		L406 L409 L500 L501 L502	1-410-214-31 1-459-155-00 1-407-365-00	INDUCTOR 68UH INDUCTOR CHIP 68UH COIL (WITH CORE) 45UH COIL,CHOKE COIL,CHOKE	



The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

	ı
	ŀ
	ı
	ł
	ı

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
L503 L504		INDUCTOR 33mH INDUCTOR 18UH		Q345	8-729-422-29	TRANSISTOR 2SD601A-S	
L505 L507 L508	1-410-671-31 1-410-686-11	INDUCTOR 47UH INDUCTOR 1mH INDUCTOR 27UH		Q350 Q351 Q352 Q353	8-729-422-29 8-729-422-29	TRANSISTOR 2SB709A-R TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S	
L509 L511	1-459-105-21	COIL, DYNAMIC CONVERSION (INDUCTOR OUH	CHOKE	Q354	8-729-422-29	TRANSISTOR 2SD601A-S	
L512 L513 L514	1-412-447-11	COIL (WITH CORE) 45UH INDUCTOR 3.9mH COIL, DUST CORE		Q355 Q356 Q360 Q361	1-801-806-11 8-729-907-26	TRANSISTOR 2SD601A-S TRANSISTOR DTC144EKA-T146 TRANSISTOR IMX1 TRANSISTOR DTA144EKA-T146	
L515 L516 A L517	1-416-162-11	COIL, DUST CORE COIL, HORIZONTAL LINEARITY INDUCTOR 680UH	Č	Q362 Q363	8-729-422-29	TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S	
L317	1-412-547-21			Q364 Q365	1-801-806-11 1-801-806-11	TRANSISTOR DTC144EKA-T146 TRANSISTOR DTC144EKA-T146	
NL500	1 510 526 11	<neon lamp=""> LAMP, NEON</neon>		Q366 Q367	8-729-422-37 8-729 <b>-</b> 422-37	TRANSISTOR 2SB709A-R TRANSISTOR 2SB709A-R	
NESOU	1-319-320-11	EAMI, NEON		Q368 Q369		TRANSISTOR 2SB709A-R TRANSISTOR DTA144EKA-T146	
Q101	1-801-806-11	<transistor> TRANSISTOR DTC144EKA-T146</transistor>		Q372 Q380 Q381	1-801-806-11	TRANSISTOR DTC144EKA-T146 TRANSISTOR DTC144EKA-T146 TRANSISTOR DTC144EKA-T146	
Q104 Q105	8-729-907-26 8-729-027-38	TRANSISTOR IMX1 TRANSISTOR DTA144EKA-T146		Q382	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q107 Q108		TRANSISTOR DTA144EKA-T146 TRANSISTOR 2SD601A-S		Q383 Q384 Q385	1-801-806-11	TRANSISTOR DTC144EKA-T146 TRANSISTOR DTC144EKA-T146 TRANSISTOR DTC144EKA-T146	
Q110 Q112		TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S		Q386 Q386	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q113 Q114	8-729-422-29	TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S		Q401 Q402	8-729-422-29	TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S	
Q200 Q201		TRANSISTOR 2SD774-34 TRANSISTOR 2SD601A-S	·	Q407 Q409 Q410	8-729-422-37	TRANSISTOR 2SD601A-S TRANSISTOR 2SB709A-R TRANSISTOR IMX1	
Q300 Q301	8-729-422-29 8-729-422-29	TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S		Q412	8-729-216-22	TRANSISTOR 2SA1162-G	
Q302 Q303		TRANSISTOR 2SA1162-G TRANSISTOR 2SD601A-S		Q414 Q415 Q416	8-729-422-37	TRANSISTOR 2SB709A-R TRANSISTOR 2SB709A-R TRANSISTOR 2SB709A-R	
Q305 Q306		TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S	,	Q417		TRANSISTOR 2SB709A-R	
Q307 Q308	8-729-422-29	TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S TRANSISTOR 2SB709A-R		Q418 Q419 Q420	8-729-422-37	TRANSISTOR 2SC1623-L5L6 TRANSISTOR 2SB709A-R TRANSISTOR 2SB709A-R	
Q309 Q310		TRANSISTOR 2SB709A-R		Q420 Q421 Q422	1-801-806-11	TRANSISTOR 25B709A-R TRANSISTOR DTC144EKA-T146 TRANSISTOR 2SC1623-L5L6	
Q311 Q312	8-729-422-29	TRANSISTOR 2SB709A-R TRANSISTOR 2SD601A-S		Q423	8-729-422-29	TRANSISTOR 2SD601A-S	
Q313 Q314		TRANSISTOR 2SB709A-R TRANSISTOR DTA144EKA-T146		Q424 Q425 Q426	1-801-806-11	TRANSISTOR DTC144EKA-T146 TRANSISTOR DTC144EKA-T146 TRANSISTOR DTC144EKA-T146	
Q315 Q316	8-729-422-29	TRANSISTOR 2SB709A-R TRANSISTOR 2SD601A-S		Q428	8-729-422-37	TRANSISTOR 2SB709A-R	
Q318 Q319 Q320	8-729-422-29	TRANSISTOR 2SB709A-R TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S		Q429 Q430 Q431	8-729-422-29	TRANSISTOR 2SB709A-R TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S	
Q321		TRANSISTOR 2SD601A-S		Q432 Q433	8-729-422-29	TRANSISTOR 2SD601A-S TRANSISTOR DTC144EKA-T146	
Q322 Q323	1-801-806-11	TRANSISTOR 2SD601A-S TRANSISTOR DTC144EKA-T146		Q434		TRANSISTOR 2SD601A-S	
Q324 Q325		TRANSISTOR DTC144EKA-T146 TRANSISTOR 2SD601A-S		Q435 Q436 Q437	1-801-806-11	TRANSISTOR DTC144EKA-T146 TRANSISTOR DTC144EKA-T146 TRANSISTOR DTC144EKA-T146	
Q326 Q327	8-729-422-37	TRANSISTOR 2SD601A-S TRANSISTOR 2SB709A-R		Q442	8-729-422-29	TRANSISTOR 2SD601A-S	
Q328 Q329 Q330	8-729-141-53	TRANSISTOR 2SK94-X2X3X4 TRANSISTOR 2SK94-X2X3X4 TRANSISTOR 2SB709A-R		Q443 Q444 Q445	8-729-422-29	TRANSISTOR 2SA1162-G TRANSISTOR 2SD601A-S TRANSISTOR DTC144EKA-T146	
Q331	8-729-422-37	TRANSISTOR 2SB709A-R		Q446 Q447	1-801-806-11	TRANSISTOR DTC144EKA-T146 TRANSISTOR DTC144EKA-T146	
Q332 Q333 Q335	8-729-422-29	TRANSISTOR DTC144EKA-T146 TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S		Q448 Q449		TRANSISTOR DTC144EKA-T146 TRANSISTOR DTC144EKA-T146	
Q338	8-729-120-28	TRANSISTOR 2SC1623-L5L6		Q500 Q501	8-729-422-37 8-729-821-87	TRANSISTOR 2SB709A-R TRANSISTOR 2SD1878-CA	
Q339 Q341	8-729-920-39	TRANSISTOR 2SB709A-R TRANSISTOR IMT1US		Q502 Q503		TRANSISTOR 2SC2688-LK TRANSISTOR 2SD1210(LK)-MT2	
Q342 Q343		TRANSISTOR IMT1US TRANSISTOR IMT1US		Q505 Q505		TRANSISTOR 2SD601A-S	



REF. NO. PART NO.	DESCRIPTION		REMARK	REF. NO.	PART NO.	DESCRIPTION		F	REMARK
Q507 8-729-422-29 Q508 8-729-422-37	TRANSISTOR 2SI TRANSISTOR 2SI TRANSISTOR 2SI	D601A-S B709A-R		R200 R201 R202 R203	1-216-049-91 1-212-857-00 1-260-095-11	FUSIBLE CARBON	30K 1K 10 470	0.50% 5% 5% 5%	1/10W 1/10W 1/4W F 1/2W
Q512 8-729-195-82 Q513 8-729-122-03 Q514 8-729-901-00	TRANSISTOR 2SI TRANSISTOR 2SI TRANSISTOR 2SI TRANSISTOR DT TRANSISTOR 2SI	C2958-L A1220A-P CC124EK		R204 R205 R206 R207 R208	1-260-072-11 1-216-647-11 1-216-073-00 1-216-065-91 1-216-065-91	METAL CHIP RES,CHIP RES,CHIP	4.7 680 10K 4.7K 4.7K	5% 0.50% 5% 5% 5%	1/2W 1/10W 1/10W 1/10W 1/10W
Q517 8-729-027-38 Q518 1-801-806-11 Q519 1-801-806-11	TRANSISTOR DT TRANSISTOR DT TRANSISTOR DT TRANSISTOR DT TRANSISTOR 28	TA144EKA-T146 TC144EKA-T146 TC144EKA-T146		R209 R210 R211 R302	1-216-073-00 1-216-061-00 1-249-393-11 1-216-025-91	RES,CHIP RES,CHIP CARBON	10K 3.3K 10 100	5% 5% 5% 5%	1/10W 1/10W 1/4W F 1/10W
Q522 8-729-422-29 Q523 8-729-422-29 Q524 8-729-422-29 Q525 8-729-422-37	TRANSISTOR 2SI TRANSISTOR 2SI TRANSISTOR 2SI TRANSISTOR 2SI	D601A-S D601A-S B709A-R		R304 R307 R308 R311	1-216-025-91 1-216-115-00 1-216-065-91 1-216-055-00	RES,CHIP RES,CHIP	100 560K 4.7K 1.8K	5% 5% 5%	1/10W 1/10W 1/10W 1/10W
Q534 8-729-422-29	TRANSISTOR DT TRANSISTOR 2S TRANSISTOR 2S	D601A-S		R312 R313 R314	1-216-073-00 1-216-648-11 1-216-099-00	METAL CHIP	10K 750 120K	5% 0.50% 5%	1/10W 1/10W 1/10W
Q333 8-129-422-22	<resistor></resistor>	DOUTH S		R315 R316 R317 R318	1-216-099-00 1-216-049-91 1-216-057-00 1-216-049-91	RES,CHIP RES,CHIP	120K 1K 2.2K 1K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W
R101 1-216-025-91 R102 1-216-025-91 R103 1-216-025-91	RES,CHIP RES,CHIP	100 5% 100 5% 100 5%	1/10W 1/10W 1/10W	R320 R321	1-216-057-00 1-216-051-00	RES,CHIP RES,CHIP	2.2K 1.2K	5% 5%	1/10W 1/10W
R104 1-216-073-00 R105 1-216-059-00 R106 1-216-065-91	RES,CHIP	10K 5% 2.7K 5% 4.7K 5%	1/10W 1/10W 1/10W	R322 R323 R324 R325	1-216-035-00 1-216-109-00 1-216-101-00 1-216-037-00	RES,CHIP RES,CHIP	270 330K 150K 330	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W
R107 1-216-065-91 R108 1-216-065-91 R109 1-216-065-91 R110 1-216-073-00	RES,CHIP RES,CHIP RES,CHIP	4.7K 5% 4.7K 5% 4.7K 5% 4.7K 5% 10K 5%	1/10W 1/10W 1/10W 1/10W	R326 R328 R329 R330	1-216-033-00 1-216-121-91 1-216-055-00 1-216-089-91	RES,CHIP RES,CHIP RES,CHIP	220 1M 1.8K 47K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W
R113 1-216-085-00 R117 1-216-073-00 R119 1-216-073-00	RES,CHIP RES,CHIP	33K 5% 10K 5% 10K 5%	1/10W 1/10W 1/10W	R331 R332	1-216-093-00 1-216-097-91	RES,CHIP RES,CHIP	68K 100K	5% 5%	1/10W 1/10W
R130 1-216-099-00 R132 1-216-065-91 R134 1-216-065-91	RES,CHIP	120K 5% 4.7K 5% 4.7K 5%	1/10W 1/10W 1/10W	R333 R334 R335 R336	1-216-097-91 1-216-093-00 1-216-083-00 1-216-065-91	RES,CHIP RES,CHIP	100K 68K 27K 4.7K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W
R137 1-216-065-91 R140 1-216-033-00 R141 1-216-085-00 R144 1-216-295-91	RES,CHIP RES,CHIP RES,CHIP	4.7K 5% 220 5% 33K 5% 0	1/10W 1/10W 1/10W	R342 R345 R346 R349	1-216-065-91 1-216-063-91 1-216-057-00	RES,CHIP RES,CHIP	4.7K 3.9K 2.2K 62K	5% 5% 5%	1/10W 1/10W 1/10W
R149 1-216-065-91 R151 1-216-061-00 R154 1-216-065-91	RES,CHIP RES,CHIP	4.7K 5% 3.3K 5% 4.7K 5%	1/10W 1/10W 1/10W	R350 R351	1-216-085-00 1-216-061-00 1-216-123-11	RES,CHIP RES,CHIP	33K 3.3K 1.2M	5% 5% 5%	1/10W 1/10W 1/10W
R155 1-216-083-00 R157 1-216-065-91 R158 1-216-295-91	RES,CHIP SHORT	27K 5% 4.7K 5%	1/10W 1/10W	R354 R357 R366 R371	1-216-123-11 1-216-121-91 1-216-065-91 1-216-025-91	RES,CHIP RES,CHIP	1.2M 1M 4.7K 100	5% 5% 5%	1/10W 1/10W 1/10W 1/10W
R159 1-216-063-91 R160 1-216-061-00 R162 1-216-065-91 R163 1-216-065-91	RES,CHIP RES,CHIP	3.9K 5% 3.3K 5% 4.7K 5% 4.7K 5%	1/10W 1/10W 1/10W 1/10W	R372 R373 R374 R375		METAL CHIP METAL CHIP	10K 560 680 10K	5% 0.50% 0.50% 5%	1/10W 1/10W 1/10W 1/10W
R164 1-216-067-00 R165 1-216-295-93 R167 1-216-061-00 R168 1-216-085-00	SHORT RES,CHIP RES,CHIP	5.6K 5% 0 3.3K 5% 33K 5%	1/10W 1/10W 1/10W	R376 R378 R379	1-216-111-91 1-216-114-00 1-216-067-00	RES,CHIP RES,CHIP	390K 510K 5.6K	5% 5%	1/10W 1/10W 1/10W
R169 1-216-107-00 R171 1-216-031-00 R172 1-216-295-93	RES,CHIP	270K 5% 180 5% 0	1/10W 1/10W	R380 R381 R382	1-216-065-91 1-216-689-11 1-216-101-00	RES,CHIP	4.7K 39K 150K	5% 5% 5%	1/10W 1/10W 1/10W
R177 1-216-214-00 R181 1-216-065-91 R184 1-216-649-11	RES,CHIP RES,CHIP METAL CHIP	4.7K 5% 4.7K 5% 820 0.50%		R386 R387 R388 R389		RES,CHIP RES,CHIP METAL CHIP	56K 150 390 820	5% 5% 5% 0.50%	1/10W 1/10W 1/10W 1/10W
R185 1-216-073-00 R189 1-216-073-00 R190 1-216-049-91 R192 1-216-073-00 R195 1-216-071-00	RES,CHIP RES,CHIP RES,CHIP	10K 5% 10K 5% 1K 5% 10K 5% 8.2K 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R390 R393 R394 R395 R397	1-249-393-11 1-216-073-00 1-216-083-00 1-216-651-11 1-216-113-00	RES,CHIP RES,CHIP METAL CHIP	10K 27K 1K 470K	5% 5% 0.50% 5%	1/4W F 1/10W 1/10W 1/10W 1/10W



REF. NO.	PART NO.	DESCRIPTION		]	REMARK	REF. NO.	PART NO.	DESCRIPTION		·F	REMARK
R398	1-216-105-91	RES.CHIP	220K	5%	1/10W	R500	1-216-689-11	RES.CHIP	39K	5%	1/10W
		•				R501	1-216-077-00	RES,CHIP	15K	5%	1/10W
R399 R400	1-216-111-91 1-216-113-00		390K 470K	5% 5%	1/10W 1/10W	R502	1-216-6//-11	METAL CHIP	12K	0.50%	1/10W
R404	1-216-029-00	RES,CHIP	150	5%	1/10W	R503		METAL CHIP	12K	0.50%	1/10W
R406 R407	1-216-083-00 1-216-077-00		27K 15K	5% 5%	1/10W 1/10W	R504 R505	1-216-111-91 1-216-067-00		390K 5.6K	5% 5%	1/10W 1/10W
		•				R506	1-216-073-00	RES,CHIP	10 <b>K</b>	5%	1/10W
R408 R410	1-216-689-11 1-216-069-00	METAL CHIP RES.CHIP	39K 6.8K	0.50% 5%	1/10W 1/10W	R507	1-216-083-00	RES,CHIP	27K	5%	1/10W
R411	1-216-033-00	RES,CHIP	220	5%	1/10W	R508	1-216-105-91		220K	5%	1/10W
R413 R414		METAL CHIP METAL CHIP	5.1K 8.2K	0.50% 0.50%	1/10W 1/10W	R509 R510	1-216-089-91 1-216-097-91		47K 100K	5% 5%	1/10W 1/10W
						R511	1-216-099-00	RES,CHIP	120K	5%	1/10W
R416 R417	1-216-113-00	RES,CHIP METAL CHIP	470K 3.9K	5% 0.50%	1/10W 1/10W	R512	1-216-055-00	RES,CHIP	1.8K	5%	1/10 <b>W</b>
R418	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W	R513	1-216-295-91		0		
R419 R420	1-216-065-91	RES,CHIP METAL CHIP	4.7K 33K	5% 0.50%	1/10W 1/10W	R514 R515	1-216-295-91	SHORT METAL CHIP	0 10K	0.50%	1/10W
K420	1-210-007-11	WEIAL CITI				R516	1-216-103-00		180K	5%	1/10W
R426 R428	1-216-039-00 1-216-097-91		390 100K ·	5% 5%	1/10W 1/10W	R517	1-214-888-00	METAL	10 <b>K</b>	1%	1/2W
R429	1-216-073-00		10K	5%	1/10W	R518	1-260-123-11	CARBON	100K	5%	1/2W
R430	1-216-119-00		820K	5%	1/10W	R519	1-216-017-91		47	5% 5%	1/10W 1/4W F
R431	1-216-097-91	RES,CHIP	100K	5%	1/10W	R520 R521	1-249-423-11 1-216-065-91		3.3K 4.7K	5%	1/4W F 1/10W
R434	1-216-109-00		330K	5%	1/10W	R523	1-215-892-11	METAL OXIDE	1K	5%	2W F
R435 R436	1-216-105-91 1-216-113-00		220K 470K	5% 5%	1/10W 1/10W	R524	1-216-093-00	RES,CHIP	68K	5%	1/10W
R437	1-216-097-91		100K	5%	1/10W	R525	1-216-069-00		6.8K	5%	1/10W
R441	1-216-645-11	METAL CHIP	560	0.50%	1/10W	R526 R527	1-216-089-91 1-216-089-91		47K 47K	5% 5%	1/10W 1/10W
R442		METAL CHIP	680	0.50%	1/10W	R528	1-216-089-91	RES,CHIP	47K	5%	1/10W
R443 R444	1-216-049-91 1-216-105-91		1K 220K	5% 5%	1/10W 1/10W	R529	1-216-089-91	RES.CHIP	47K	5%	1/10W
R445	1-216-095-00	RES,CHIP	82K	5%	1/10W	R530	1-216-367-11	METAL OXIDE	0.68	5%	2W F
R447	1-216-069-00	RES,CHIP	6.8K	5%	1/10W	R531 R532	1-216-077-00 1-215-920-11	METAL OXIDE	15K 3.3K	5% 5%	1/10W 3W F
R449	1-216-073-00		10K	5%	1/10W	R533	1-247-723-11		6.8K	5%	1/4W F
R451 R452	1-216-037-00	RES,CHIP METAL CHIP	330 1K	5% 0.50%	1/10W 1/10W	R534	1-216-085-00	RES CHIP	33K	5%	1/10W
R453	1-216-097-91	RES,CHIP	100K	5%	1/10W	R535	1-249-448-11	CARBON	1.2	5%	1/4W F
R459	1-216-649-11	METAL CHIP	820	0.50%	1/10W	R536 R537	1-216-101-00 1-216-089-91		150K 47K	5% 5%	1/10W 1/10W
R460	1-216-295-91		0			R539	1-216-065-91		4.7K	5%	1/10W
R462 R463	1-216-651-11 1-216-065-91	METAL CHIP	1K 4.7K	0.50% 5%	1/10W 1/10W	R540	1-216-113-00	RES CHIP	470K	5%	1/10W
R464	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	R541	1-249-383-11	CARBON	1.5	5%	1/4W F
R465	1-216-025-91	RES,CHIP	100	5%	1/10W	R542 R543	1-216-057-00 1-212-883-00		2.2K 120	5% 5%	1/10W 1/4W F
R466	1-216-077-00	RES,CHIP	15K	5%	1/10W	R544	1-216-095-00		82K	5%	1/10W
R468 R469	1-216-105-91 1-216-063-91		220K 3.9K	5% 5%	1/10W 1/10W	R545	1-216-073-00	RES CHIP	10K	5%	1/10W
R471	1-216-109-00	RES,CHIP	330K	5%	1/10W	R546	1-249-425-11	CARBON	4.7K	5%	1/4W F
R472	1-216-077-00	RES,CHIP	15K	5%	1/10W	R547 R548	1-216-091-00 1-216-057-00		56K 2.2K	5% 5%	1/10W 1/10W
R473	1-216-121-91	RES,CHIP	1M	5%	1/10W	R549		METAL CHIP	12K	0.50%	1/10W
R476	1-216-061-00 1-216-061-00		3.3K 3.3K	5% 5%	1/10W 1/10W	R550	1-216-053-00	DEC CHID	1.5K	5%	1/10W
R477 R478	1-216-061-00		10K	5%	1/10W	R551	1-216-077-00	RES,CHIP	15K	5%	1/10W
R479	1-216-085-00	RES,CHIP	33K	5%	1/10W	R552 R553	1-216-033-00 1-216-083-00		220 27K	5% 5%	1/10W 1/10W
R482	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	R554	1-216-083-00		82K	5%	1/10W
R483	1-216-025-91	RES,CHIP	100	5%	1/10W	Dese	1 216 602 11	METAL CHID	£117	0.50%	1/10W
R484 R485	1-216-031-11	METAL CHIP RES.CHIP	1 <b>K</b> 220	0.50% 5%	1/10W 1/10W	R555 R556	1-215-897-11	METAL CHIP METAL OXIDE	51K 6.8K	5%	2W F
R486		METAL CHIP	18K	0.50%	1/10W	R557	1-216-462-00	METAL OXIDE	8.2K		2W F
R487	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W	R558 R559	1-215-891-11 1-216-105-91	METAL OXIDE RES,CHIP	680 220K	5% 5%	2W F 1/10W
R488	1-216-073-00	RES,CHIP	10 <b>K</b>	5%	1/10W			•			
R489 R491	1-216-077 <b>-</b> 00 1-216-061-00		15K 3.3K	5% 5%	1/10W 1/10W	R560 R561	1-216-091-00 1-216-049-91		56K 1K	5% 5%	1/10W 1/10W
R492	1-216-085-00		33K	5%	1/10W	R563	1-216-017-91	RES,CHIP	47	5%	1/10W
R493	1-216-295-91	SHORT	0	•		R564 R565	1-216-107-00 1-216-033-00		270 <b>K</b> 220	5% 5%	1/10W 1/10W
R494	1-216-696-11	METAL CHIP	75K	0.50%	1/10W						
R495 R496	1-216-651-11 1-216-073-00	METAL CHIP RES.CHIP	1 <b>K</b> 10 <b>K</b>	0.50% 5%	1/10W 1/10W	R566 R567	1-216-685-11 1-216-081-00	METAL CHIP RES.CHIP	27K 22K	0.50% 5%	1/10W 1/10W
R497	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W	R568	1-216-073-00	RES,CHIP	10K	5%	1/10W
R498	1-216-061-00	RES.CHIP	3.3K	5%	1/10W	R569 R571	1-260-114-11 1-216-065-91		18K 4.7K	5% 5%	1/2W 1/10W
R499	1-216-033-00		220	5%	1/10W					*	



REF. NO	. PART NO.	DESCRIPTION		R	EMARK	REF. NO.	PART NO.	DESCRIPTION		F	REMARK
R572	1-216-059-00 1-216-071-00		2.7K 8.2K	5% 5%	1/10W 1/10W	R1188	1-216-131-11	RES,CHIP	2.7M	5%	1/10W
R573 R575 R576 R578	1-249-383-11 1-216-101-00 1-216-693-11	CARBON RES,CHIP METAL CHIP	1.5 150K 56K	5% 5% 0.50%	1/4W F 1/10W 1/10W	R1189 R1190 R1191 R1192	1-216-071-00 1-216-131-11 1-216-071-00 1-216-131-11	RES,CHIP RES,CHIP RES,CHIP	8.2K 2.7M 8.2K 2.7M	5% 5% 5%	1/10W 1/10W 1/10W 1/10W
R579 R580 R582 R583 R584	1-216-081-00 1-216-105-91 1-216-085-00 1-216-039-00 1-216-071-00	RES,CHIP RES,CHIP RES,CHIP	22K 220K 33K 390 8.2K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R1193 R1194 R1195 R1196	1-216-025-91 1-216-085-00 1-216-025-91 1-216-085-00 1-216-025-91	RES,CHIP RES,CHIP RES,CHIP	100 33K 100 33K 100	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
R585 R586 R587 R588 R589		METAL CHIP METAL CHIP RES,CHIP	220 30K 10K 15K 5.6K	5% 0.50% 0.50% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R1197 R1198 R1303 R1304 R1305	1-216-085-00 1-216-073-00 1-216-689-11 1-216-033-00	RES,CHIP RES,CHIP RES,CHIP RES,CHIP	33K 10K 39K 220	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W
R590 R591 R592 R593	1-216-081-00 1-216-682-11 1-247-688-11 1-216-647-11	RES,CHIP METAL CHIP CARBON METAL CHIP	22K 20K 10 680	5% 0.50% 5% 0.50%	1/10W 1/10W 1/4W F 1/10W 1/4W	R1306 R1307 R1308 R1309 R1310	1-216-091-00	METAL CHIP RES,CHIP	560 56K 560 100 2.2K	0.50% 5% 0.50% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
R594 R595 R596	1-247-713-11 1-216-689-11 1-214-754-00	RES,CHIP	1K 39K 11K	5% 5% 1%	1/4 <b>W</b> 1/10W 1/4W	R1311 R1312	1-216-037-00 1-216-089-91 1-216-027-00	RES,CHIP	47K 120	5% 5%	1/10W 1/10W
R597 R598 R599	1-249-417-11 1-216-085-00 1-216-645-11	CARBON RES,CHIP METAL CHIP	1K 33K 560	5% 5% 0.50%	1/4W F 1/10W 1/10W	R1314 R1315 R1316	1-216-097-91 1-216-081-00 1-216-073-00 1-216-065-91	RES,CHIP RES,CHIP RES,CHIP	100K 22K 10K 4.7K 220	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
R1103 R1104 R1105 R1106 R1107	1-216-077-00 1-216-699-11 1-216-073-00 1-216-097-91 1-216-059-00	METAL CHIP RES,CHIP RES,CHIP	15K 100K 10K 100K 2.7K	5% 0.50% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R1317 R1318 R1319 R1320 R1321	1-216-033-00 1-216-089-91 1-216-085-00 1-216-057-00	RES,CHIP RES,CHIP	47K 33K 2.2K 820	5% 5% 5% 0.50%	1/10W 1/10W 1/10W 1/10W
R1108 R1113 R1123 R1125 R1126	1-216-681-11 1-216-081-00 1-216-071-00 1-216-049-91 1-216-041-00	RES,CHIP RES,CHIP	18K 22K 8.2K 1K 470	0.50% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R1322 R1324 R1325 R1326	1-216-057-00 1-216-061-00 1-216-652-11 1-216-073-00	RES,CHIP RES,CHIP METAL CHIP RES,CHIP	2.2K 3.3K 1.1K 10K	5% 5% 0.50% 5%	1/10W 1/10W 1/10W 1/10W
R1128 R1129 R1130 R1131 R1132	1-216-065-91 1-216-071-00 1-216-049-91 1-216-049-91	RES,CHIP RES,CHIP RES,CHIP	4.7K 8.2K 1K 1K 8.2K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R1327 R1328 R1329 R1330 R1331	1-216-073-00 1-216-125-00 1-216-103-00 1-216-081-00 1-216-679-11	RES,CHIP RES,CHIP	10K 1.5M 180K 22K 15K	5% 5% 5% 5% 0.50%	1/10W 1/10W 1/10W 1/10W 1/10W
R1133 R1134 R1136 R1139	1-216-069-00 1-216-073-00 1-216-097-93 1-216-055-00	RES,CHIP RES,CHIP RES,CHIP	6.8K 10K 100K 1.8K 1.2K	5% 5% 5% 5% 0.50%	1/10W 1/10W 1/10W 1/10W 1/10W	R1332 R1333 R1334 R1335 R1336	1-216-671-11 1-216-049-91 1-216-063-91 1-249-401-11 1-216-095-00	RES,CHIP CARBON	6.8K 1K 3.9K 47 82K	0.50% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/4W F 1/10W
R1140 R1141 R1142	1-216-073-00		10K 1.2K	5% 0.50%	1/10W 1/10W 1/10W	R1337 R1338	1-216-061-00		3.3K 680	5% 0.50%	1/10W 1/10W
R1143 R1146 R1147	1-216-653-1: 1-216-057-00 1-216-057-00	) RES,CHIP	1.2K 2.2K 2.2K 330	0.50% 5% 5%	1/10W 1/10W 1/10W	R1339 R1340 R1341 R1342 R1343	1-216-033-00 1-216-033-00 1-216-033-00 1-216-083-00 1-216-037-00	RES,CHIP RES,CHIP RES,CHIP	220 220 220 27K 330	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
R1151 R1155 R1163 R1164	1-216-081-00 1-216-133-00 1-216-033-00 1-216-049-9	O RES,CHIP O RES,CHIP O RES,CHIP I RES,CHIP	22K 3.3M 220 1K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W	R1344 R1345 R1346 R1347	1-216-093-00 1-216-109-00 1-216-097-91 1-216-073-00	RES,CHIP RES,CHIP RES,CHIP RES,CHIP	68K 330K 100K 10K	5% 5% 5%	1/10W 1/10W 1/10W 1/10W
R1165 R1170 R1171 R1172 R1174	1-216-089-9	0 RES,CHIP 0 RES,CHIP	1K 47K 33K 33K 47K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R1348 R1349 R1350 R1351 R1352	1-216-071-00 1-216-035-00 1-216-073-00 1-216-033-00 1-216-025-91	RES,CHIP RES,CHIP RES,CHIP	8.2K 270 10K 220 100	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
R1177 R1179 R1180 R1182 R1183	1-216-041-0 1-216-089-9 1-216-131-1	0 RES,CHIP 0 RES,CHIP 1 RES,CHIP 1 RES,CHIP 0 RES,CHIP	8.2K 470 47K 2.7M 8.2K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R1353 R1354 R1355 R1356	1-216-065-91 1-216-089-91 1-216-033-00 1-216-105-91	RES,CHIP  RES,CHIP  RES,CHIP  RES,CHIP	4.7K 47K 220 220K	5% 5% 5%	1/10W 1/10W 1/10W 1/10W
R1184 R1185 R1186 R1187	1-216-071-0 1-216-131-1	RES,CHIP RES,CHIP RES,CHIP RES,CHIP	2.7M 8.2K 2.7M 8.2K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W	R1357 R1358 R1359 R1360	1-216-101-00 1-216-071-00 1-216-099-00 1-216-065-91	RES,CHIP RES,CHIP	150K 8.2K 120K 4.7K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W



REF. NO.	PART NO.	DESCRIPTION		R	REMARK	REF. NO.	PART NO.	DESCRIPTION		F	EMARK
R1361 R1362 R1363	1-216-113-00 1-216-676-11 1-216-113-00	METAL CHIP	470K 11K 470K	5% 0.50% 5%	1/10W 1/10W 1/10W	R1432 R1433 R1434 R1435	1-216-089-91 1-216-085-00 1-216-645-11 1-216-055-00	RES,CHIP METAL CHIP	47K 33K 560 1.8K	5% 5% 0.50% 5%	1/10W 1/10W 1/10W 1/10W
R1364 R1365 R1366 R1367 R1368	1-216-073-00 1-216-131-11 1-216-081-00 1-216-660-11 1-216-059-00	RES,CHIP RES,CHIP METAL CHIP	10K 2.7M 22K 2.4K 2.7K	5% 5% 5% 0.50% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R1436 R1437 R1438 R1439 R1440	1-216-073-00 1-216-069-00 1-216-073-00 1-216-059-00 1-216-041-00	RES,CHIP RES,CHIP RES,CHIP RES,CHIP	10K 6.8K 10K 2.7K 470	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
R1369 R1370 R1371 R1372 R1373	1-216-051-00 1-216-105-91 1-216-113-00 1-216-089-91 1-216-063-91	RES,CHIP RES,CHIP RES,CHIP	1,2K 220K 470K 47K 3.9K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R1441 R1442 R1443 R1444 R1445	1-216-033-00 1-216-073-00 1-216-013-00 1-216-057-00 1-216-071-00	RES,CHIP RES,CHIP RES,CHIP RES,CHIP	220 10K 33 2.2K 8.2K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
R1374 R1375 R1376 R1378 R1379		METAL CHIP METAL CHIP RES,CHIP	150K 560 680 4.7K 330	5% 0.50% 0.50% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R1446 R1447 R1448 R1449 R1450	1-216-071-00 1-216-081-00 1-216-085-00 1-216-057-00 1-216-129-00	RES,CHIP RES,CHIP RES,CHIP RES,CHIP	8.2K 22K 33K 2.2K 2.2M	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
R1380 R1381 R1382 R1383 R1384	1-216-647-11 1-216-073-00	METAL CHIP	560 680 10K 18K 56K	0.50% 0.50% 5% 0.50% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R1451 R1452 R1453 R1454	1-216-093-00 1-216-085-00 1-216-013-00 1-216-065-91	RES,CHIP RES,CHIP RES,CHIP	68K 33K 33 4.7K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W
R1385 R1386 R1387 R1388	1-216-073-00 1-216-077-00 1-216-653-11	RES,CHIP	10K 15K 1.2K 39K	5% 5% 0.50% 0.50%	1/10W 1/10W 1/10W 1/10W	R1455 R1456 R1457 R1458	1-216-113-00 1-216-129-00 1-216-089-91 1-216-085-00	RES,CHIP RES,CHIP RES,CHIP	470K 2.2M 47K 33K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W
R1389 R1390 R1391 R1392	1-216-657-11	METAL CHIP METAL CHIP RES,CHIP	1.8K 680 100 470	0.50% 0.50% 5% 5%	1/10W 1/10W 1/10W 1/10W	R1459 R1460 R1461 R1462	1-216-133-00 1-216-097-91 1-216-645-11	RES,CHIP	3.3M 100K 560	5% 5% 0.50% 0.50%	1/10W 1/10W 1/10W
R1393 R1394 R1395 R1396	1-216-063-91 1-216-041-00 1-216-071-00 1-216-071-00	RES,CHIP RES,CHIP	3.9K 470 8.2K 8.2K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W	R1463 R1464 R1465 R1466		METAL CHIP RES,CHIP RES,CHIP	560 2.2K 100K 1.8K	0.50% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W
R1397 R1399 R1401	1-216-065-91 1-216-073-00 1-216-085-00 1-216-295-91	RES,CHIP RES,CHIP RES,CHIP	4.7K 10K 33K	5% 5% 5%	1/10W 1/10W 1/10W	R1467 R1468 R1469 R1470 R1471	1-216-073-00 1-216-091-00 1-216-057-00 1-216-057-00 1-216-049-91	RES,CHIP RES,CHIP RES,CHIP	10K 56K 2.2K 2.2K 1K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
R1403 R1404 R1405 R1406	1-216-651-11 1-216-681-11 1-216-071-00	METAL CHIP METAL CHIP	1K 18K 8.2K 1.2K	0.50% 0.50% 5% 0.50%	1/10W 1/10W 1/10W 1/10W	R1472 R1473 R1475 R1476	1-216-085-00 1-216-081-00	RES,CHIP RES,CHIP METAL CHIP	33K 22K 12K 3.9K	5% 5% 0.50% 5%	1/10W 1/10W 1/10W 1/10W
R1407 R1408 R1409 R1410 R1411	1-216-061-00 1-216-113-00 1-216-295-91 1-216-053-00 1-216-073-00	RES,CHIP SHORT RES,CHIP	3,3K 470K 0 1.5K 10K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W	R1477 R1478 R1480 R1481	1-216-057-00 1-216-061-00 1-216-089-91 1-216-115-00	RES,CHIP RES,CHIP	2.2K 3.3K 47K 560K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W
R1412 R1413 R1414 R1415	1-216-107-00 1-216-081-00 1-216-057-00 1-216-093-00	RES,CHIP RES,CHIP RES,CHIP	270K 22K 2.2K 68K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W	R1482 R1483 R1484 R1485	1-216-089-91 1-216-089-91 1-216-081-00 1-216-113-00	RES,CHIP RES,CHIP RES,CHIP	47K 47K 22K 470K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W
R1416 R1417 R1418 R1419	1-216-113-00 1-216-033-00 1-216-033-00 1-216-025-91	RES,CHIP RES,CHIP	470K 220 220 100	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W	R1486 R1487 R1488 R1490	1-216-097-91 1-216-097-91 1-216-083-00 1-216-035-00	RES,CHIP RES,CHIP RES,CHIP	100K 100K 27K 270	5% 5% 5%	1/10W 1/10W 1/10W
R1420 R1421 R1422 R1423	1-216-089-91	RES,CHIP METAL CHIP RES,CHIP	47K 820 33K 2.2K	5% 0.50% 5% 5%	1/10W 1/10W 1/10W 1/10W	R1491 R1492 R1493 R1494	1-216-035-00 1-216-035-00 1-216-083-00 1-216-081-00	RES,CHIP RES,CHIP RES,CHIP	270 270 27K 22K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W
R1424 R1425 R1426 R1427	1-216-081-00 1-216-013-00 1-216-113-00	RES,CHIP RES,CHIP	22K 33 470K	5% 5% 5% 0.50%	1/10W 1/10W 1/10W 1/10W	R1495 R1496 R1498 R1500 R1501	1-216-089-91 1-216-089-91 1-216-065-91 1-216-647-11 1-216-075-00	RES,CHIP RES,CHIP METAL CHIP	47K 47K 4.7K 680 12K	5% 5% 5% 0.50% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
R1428 R1429 R1430 R1431	1-216-061-00	RES,CHIP METAL CHIP RES,CHIP	3.3K 5.1K 10K 2.2M	5% 0.50% 5% 5%	1/10W 1/10W 1/10W 1/10W	R1502 R1503 R1504 R1505	1-260-111-11 1-216-063-91	CARBON RES,CHIP METAL CHIP	10K 3.9K 30K 10	5% 5% 0.50% 5%	1/2W 1/10W 1/10W 1/4W F

The components identified by shading and mark  $\triangle$  are critical for safety. Replace only with part number specified.

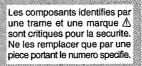
Les composants identifies par une trame et une marque \( \frac{\Lambda}{2} \) sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The components identified by 

in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.



				#						<u> </u>
PART NO.	DESCRIPTION		R	EMARK	REF. NO.	PART NO.	DESCRIPTION		R	EMARK
1-216-033-00	RES,CHIP	220	5%	1/10W	R2305			33K	5%	1/10W
		4.7K	5%	1/10W	R2307			220	5% 5%	1/10W 1/10W
1-216-077-00	RES,CHIP	15K	5%	1/10W	R2308			180K	5%	1/10W
		8.2 680		1W F 1/10W						1/10W 1/10W
		1 <b>K</b> ′		1/2W F	R2311	1-216-073-00	RES,CHIP	10K	5%	1/10W 1/10W
1-247-711-11	CARBON	680	5%	1/4W F			•			
1-216-109-00	RES,CHIP	330K	5%	1/10W	R2314	1-216-645-11	METAL CHIP	560	0.50%	1/10W 1/10W
1-215-867-00	METAL OXIDE	470	5%	1W F	R2315 R2316					1/10W 1/10W
			5% 5%		R2317			1K	5%	1/10W
1-216-029-00	RES,CHIP	150	5%	1/10W	R2318			6.8K	5%	1/10W
			5% 5%	IW F	R2320			12K	5% 0.50%	1/10W 1/10W
1-216-083-00	RES.CHIP	27K	5%	1/10W						1/10W 1/10W
1-216-089-91	RES,CHIP	47K	5%	1/10W						1/10W
1-215-869-11	METAL OXIDE	1K	5%	1W F	R2324	1-216-073-00	RES,CHIP	10 <b>K</b>	5%	1/10W
1-202-829-11	SOLID	8.2K	20%	1/2W	R2325 R2326			3.9K 470	5% 5%	1/10W 1/10W
		560K	5% 5%	1/10W 1/4W F	R2327	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
1-216-059-00	RES,CHIP	2.7K	5%	1/10W	R2328			1K	5%	1/10W
		2.2K	0.50%	1/4W F 1/10W	R2330	1-216-049-91	RES,CHIP	1K	5%	1/10W 1/10W
<b>V</b>	METAL CHIP			1/10W	R2331 R2332			2.7K 1K	5% 5%	1/10W 1/10W
		4.7 10K	5% 5%		R2333	1-216-089-91	RES.CHIP	47K	5%	1/10W
1-216-105-91	RES,CHIP	220K	5%	1/10W	R2334	1-216-041-00	RES,CHIP	470	5%	1/10W 1/10W
	•				R2336	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
1-216-391-11	METAL OXIDE	1.5	5%	3W F						1/10W
										1/10W 1/10W
1-216-105-91	RES,CHIP	220K	5%	1/10W	R2341			330 8 2K	5%	1/10W 1/10W
		10	5%					22K	5%	1/10W
1-216-091-00	RES,CHIP	56K	5%	1/10W	R2344			1M	5%	1/10W
		2.7K 0	5%	1/10W	R2345 R2346			18K 3.3K	0.50% 5%	1/10W 1/10W
		8 2K	5%	1/10W	R2347			3.3K	5%	1/10W 1/10W
1-218-760-11	METAL CHIP	220K	0.50%	1/10W						
1-249-393-11	CARBON	10	5%	1/4W F	R2350	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
1-216-049-91	RES,CHIP	1K	5%	1/10W	R2351 R2352			3.3K 3.3K	5% 5%	1/10W 1/10W
		100K 47K	5% 5%	1/10W 1/10W	R2353	1-216-041-00	RES,CHIP	470	5%	1/10W
1-216-089-91	RES,CHIP	47K	5%	1/10W	R2354			100 56V	5%	1/10W 1/10W
		47K	5%	1/10W	R2358	1-216-025-91	RES,CHIP	100	5%	1/10W
		10 <b>K</b>	5%	1/10W	R2361 R2362			120K 22K	5% 5%	1/10W 1/10W
		180K 150K	5% 5%		R2363	1-216-065-91	RES.CHIP	4.7K	5%	1/10W
1-216-073-00	RES,CHIP	10 <b>K</b>	5%	1/10W	R2364	1-216-025-91	RES,CHIP	100	5%	1/10W 1/10W
	•				R2366	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
		100	5%	1/10W	K236/			120K	3%	1/10W
										1/10W 1/10W
		39K	0.50%	1/10W	R2371	1-216-049-91	RES,CHIP	1K	5%	1/10W 1/10W
		470	5%	1/10W	R2374			100K	5%	1/10 <b>W</b>
1-216-065-91	RES,CHIP	4.7K	5%	1/10W	R2375			47K	5%	1/10W
		4.7K 6.8K	5% 0.50%	1/10W 1/10W	R2377	1-216-033-00	RES,CHIP	220	5% 5%	1/10W 1/10W
		68K	5%	1/10W	R2378	1-216-089-91	RES,CHIP	47K 220	5%	1/10W 1/10W
		220K	5%	1/10W	= • •,		- 3			
	PART NO.  1-216-033-00  1-216-033-00  1-216-065-91 1-216-360-11 1-216-360-11 1-216-360-11 1-216-360-11 1-216-350-11 1-216-109-00 1-216-355-11 1-216-027-00 1-216-355-11 1-216-029-00 1-216-350-11 1-216-427-00 1-216-350-11 1-216-039-01 1-216-083-00 1-216-390-11 1-216-089-91 1-216-059-00 1-249-414-11 1-216-659-11  249-389-11 1-216-059-00 1-246-091-00 1-216-105-91 1-216-071-00 1-216-091-00 1-216-091-00 1-216-091-00 1-216-091-01	PART NO. DESCRIPTION  1-216-033-00 RES,CHIP  1-216-083-00 RES,CHIP 1-216-083-00 RES,CHIP 1-216-073-00 RES,CHIP 1-216-360-11 METAL OXIDE 1-216-647-11 METAL CHIP 1-247-752-11 CARBON 1-247-711-11 CARBON 1-216-350-11 METAL OXIDE 1-216-350-11 METAL OXIDE 1-216-027-00 RES,CHIP 1-216-355-11 METAL OXIDE 1-216-350-11 METAL OXIDE 1-216-350-11 METAL OXIDE 1-216-350-11 METAL OXIDE 1-216-029-00 RES,CHIP 1-216-039-01 RES,CHIP 1-216-083-00 RES,CHIP 1-216-089-91 RES,CHIP 1-216-115-00 RES,CHIP 1-249-413-11 CARBON 1-215-869-11 METAL OXIDE 1-216-115-00 RES,CHIP 1-249-414-11 CARBON 1-216-059-00 RES,CHIP 1-249-414-11 CARBON 1-216-059-00 RES,CHIP 1-249-389-11 CARBON 1-216-059-00 RES,CHIP 1-249-389-11 CARBON 1-216-073-00 RES,CHIP 1-249-389-11 CARBON 1-216-073-00 RES,CHIP 1-216-081-00 RES,CHIP 1-216-081-00 RES,CHIP 1-216-081-00 RES,CHIP	PART NO.  1-216-033-00 RES,CHIP 220  1-216-065-91 RES,CHIP 27K 1-216-083-00 RES,CHIP 27K 1-216-077-00 RES,CHIP 27K 1-216-647-11 METAL OXIDE 8.2 1-216-647-11 METAL CHIP 680  1-247-752-11 CARBON 1K 1-247-711-11 CARBON 680 1-216-350-11 METAL OXIDE 12 1-216-350-11 METAL OXIDE 470  1-216-355-11 METAL OXIDE 470  1-216-355-11 METAL OXIDE 470  1-216-355-11 METAL OXIDE 12 1-216-027-00 RES,CHIP 120 1-216-029-00 RES,CHIP 120 1-216-350-11 METAL OXIDE 12 1-216-427-00 METAL OXIDE 12 1-216-427-00 METAL OXIDE 12 1-216-689-91 RES,CHIP 27K 1-249-431-11 CARBON 470 1-215-869-11 METAL OXIDE 11K 1-202-829-11 SOLID 8.2K 1-247-697-11 CARBON 560 1-247-697-11 CARBON 560 1-246-059-00 RES,CHIP 2.7K 1-249-414-11 CARBON 560 1-216-059-00 RES,CHIP 2.7K 1-249-414-11 CARBON 560 1-216-659-11 METAL CHIP 2.2K  METAL CHIP 10K 1-216-073-00 RES,CHIP 2.2K  METAL CHIP 2.2K  METAL CHIP 2.2K  METAL CHIP 2.2K  1-216-073-00 RES,CHIP 2.2K  1-216-094-11 CARBON 390 1-216-094-11 CARBON 390 1-216-091-00 RES,CHIP 56K 1-216-091-00 RES,CHIP 56K 1-216-091-00 RES,CHIP 56K 1-216-091-00 RES,CHIP 56K 1-216-093-01 RES,CHIP 10K 1-216-093-01 RES,CHIP 10K 1-216-099-01 RES,CHIP 10K 1-216	PART NO. DESCRIPTION  1-216-033-00 RES,CHIP 220 5%  1-216-065-91 RES,CHIP 4.7K 5% 1-216-083-00 RES,CHIP 15K 5% 1-216-350-11 METAL OXIDE 8.2 5% 1-216-647-11 METAL CHIP 680 0.50%  1-247-752-11 CARBON 1K 5% 1-216-350-11 METAL OXIDE 1.2 5% 1-216-079-00 RES,CHIP 120 5% 1-216-083-00 RES,CHIP 120 5% 1-216-083-01 METAL OXIDE 1.2 5% 1-216-083-01 METAL OXIDE 1.2 5% 1-216-427-00 METAL OXIDE 1.2 5% 1-216-427-00 METAL OXIDE 1.2 5% 1-216-350-11 METAL OXIDE 1.2 5% 1-216-639-00 RES,CHIP 150 5% 1-216-089-91 RES,CHIP 47K 5% 1-249-413-11 CARBON 470 5% 1-215-869-11 METAL OXIDE 1K 5% 1-247-697-11 CARBON 56 5% 1-216-059-00 RES,CHIP 2.7K 5% 1-247-697-11 CARBON 56 5% 1-216-059-00 RES,CHIP 2.7K 5% 1-249-389-11 CARBON 56 5% 1-216-059-00 RES,CHIP 2.7K 5% 1-249-389-11 CARBON 4.7 5% 1-249-389-11 CARBON 560 5% 1-216-059-00 RES,CHIP 10K 5% 1-249-389-11 CARBON 4.7 5% 1-249-389-11 CARBON 560 5% 1-216-059-10 RES,CHIP 2.2K 0.50%  METAL CHIP 1.2 5% 1-249-389-11 CARBON 10 560 5% 1-216-059-10 RES,CHIP 2.2K 5% 1-216-07-00 RES,CHIP 2.2K 5% 1-216-091-00 RES,CHIP 36K 5% 1-216-091-00 RES,CHI	PART NO.   DESCRIPTION   REMARK   1-216-033-00   RES, CHIP   220   5%   1/10W   1-216-065-91   RES, CHIP   4.7K   5%   1/10W   1-216-083-00   RES, CHIP   15K   5%   1/10W   1-216-067-11   METAL OXIDE   8.2   5%   1/10W   1-216-647-11   METAL CHIP   680   0.50%   1/10W   1-247-7752-11   CARBON   680   5%   1/2W   F 1-216-109-00   RES, CHIP   330K   5%   1/10W   1-241-109-00   RES, CHIP   20   5%   1/10W   1-216-035-11   METAL OXIDE   1.2   5%   1/10W   1-216-035-11   METAL OXIDE   1.2   5%   1/10W   1-216-035-11   METAL OXIDE   3.3   5%   1/10W   1-216-035-11   METAL OXIDE   3.3   5%   1/10W   1-216-035-11   METAL OXIDE   1.2   5%   1/10W   1-216-039-00   RES, CHIP   150   5%   1/10W   1-216-039-01   RES, CHIP   20   5%   1/10W   1-216-039-01   RES, CHIP   47K   5%   1/10W   1-216-089-91   RES, CHIP   47K   5%   1/10W   1-216-089-91   RES, CHIP   47K   5%   1/10W   1-216-059-00   RES, CHIP   560K   5%   1/10W   1-216-059-00   RES, CHIP   2.7K   5%   1/10W   1-216-091-00   RES, CHIP   3.0K   5%   1/10W   1-216-091-00   RES, CHIP   3.0K   5%   1/10W   1-216-091-00   RES, CHIP   3.0K   5%	PART NO	PART NO.   DESCRIPTION   REMARK   REF. NO.   PART NO.    -216-033-00 RES,CHIP   220   5%   1/10W   R.2305   1-216-085-00    -216-065-91 RES,CHIP   27K   5%   1/10W   R.2306   1-216-089-91    -216-067-00 RES,CHIP   27K   5%   1/10W   R.2307   1-216-037-00    -216-067-00 RES,CHIP   15K   5%   1/10W   R.2308   1-216-089-91    -216-067-00 RES,CHIP   15K   5%   1/10W   R.2309   1-216-037-00    -216-350-11 METAL CMIDE   680   0.50%   1/10W   R.2311   1-216-073-00    -216-350-11 METAL OXIDE   12   5%   1/10W   R.2311   1-216-073-00    -216-350-11 METAL OXIDE   12   5%   1/10W   R.2315   1-216-679-11    -216-350-11 METAL OXIDE   330   5%   1/10W   R.2314   1-216-049-11    -216-15-00 RES,CHIP   120   5%   1/10W   R.2315   1-216-679-11    -216-027-00 RES,CHIP   150   5%   1/10W   R.2315   1-216-609-10    -216-037-00 RES,CHIP   150   5%   1/10W   R.2315   1-216-609-10    -216-038-00 RES,CHIP   27K   5%   1/10W   R.2315   1-216-09-10    -216-038-01 RES,CHIP   27K   5%   1/10W   R.2315   1-216-09-10    -216-038-01 RES,CHIP   27K   5%   1/10W   R.2315   1-216-09-10    -216-038-01 RES,CHIP   27K   5%   1/10W   R.2315   1-216-09-10    -216-039-00 RES,CHIP   27K   5%   1/10W   R.2315   1-216-09-10    -216-039-00 RES,CHIP   27K   5%   1/10W   R.2315   1-216-09-10    -216-039-00 RES,CHIP   27K   5%   1/10W   R.2322   1-216-09-10    -216-039-00 RES,CHIP   27K   5%   1/10W   R.2323   1-216-09-10    -216-039-00 RES,CHIP   27K   5%   1/10W   R.2323   1-216-09-10    -216-039-00 RES,CHIP   27K   5%   1/10W   R.2333   1-216-09-10    -216-039-00 RES,CHIP   47K   5%   1/10W   R.2335	PART NO.   DESCRIPTION   REMARK   REF. NO.   PART NO.   DESCRIPTION	PART NO.   DESCRIPTION   REMARK   REE NO.   PART NO.   DESCRIPTION   PART NO.   PART NO.   DESCRIPTION   PART NO.   PA	PART NO.   DESCRIPTION   CREMARK   PART NO.   DESCRIPTION   PART NO.



The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.



REF. NO.	PART NO.	DESCRIPTION		Į	REMARK	REF. NO.	PART NO.	DESCRIPTION		Ī	REMARK
R2380 R2381	1-216-089-91 1-216-089-91		47K 47K	5% 5%	1/10W 1/10W	R3395	1-216-049-91	RES,CHIP	1 <b>K</b>	5%	1/10W
R2382 R2383	1-216-089-91 1-216-033-00	RES,CHIP	47K 220	5% 5%	1/10W 1/10W	R3396 R3398	1-216-041-00 1-216-685-11	RES,CHIP METAL CHIP	470 27K	5% 0.50%	1/10W 1/10W
R2384	1-216-689-11		39K	5%	1/10W	R3399 R3400	1-216-025-91 1-216-091-00	RES,CHIP	100 56K	5% 5%	1/10W 1/10W
R2389 R2390	1-216-033-00 1-216-647-11	RES,CHIP METAL CHIP	220 680	5% 0.50%	1/10W 1/10W	R3401	1-216-061-00		3.3K	5%	1/10W
R2391 R2392		METAL CHIP	680 10K	0.50% 5%	1/10W 1/10W	R3402 R3403	1-216-025-91	METAL CHIP RES,CHIP	100K 100	0.50% 5%	1/10W 1/10W
R2393	1-216-073-00		10 <b>K</b>	5%	1/10W	R3404 R3405	1-216-073-00 1-216-067-00		10K 5.6K	5% 5%	1/10W 1/10W
R2394 R2396	1-216-081-00 1-216-041-00		22K 470	5% 5%	1/10W 1/10W	R3406	1-216-073-00	RES,CHIP	10K	5%	1/10W
R2397 R2398	1-216-113-00 1-216-109-00		470K 330K	5% 5%	1/10W 1/10W	R3407 R4401	1-216-073-00 1-216-085-00	RES,CHIP	10K 33K	5% 5%	1/10W 1/10W
R2399	1-216-073-00	•	10 <b>K</b>	5%	1/10W	R4404 R4405	1-216-073-00 1-216-067-00	RES,CHIP	10K 5.6K	5% 5%	1/10W 1/10W
R2501 R2502	1-216-083-00 1-216-085-00	RES,CHIP	27K 33K	5% 5%	1/10W 1/10W	R4407	1-216-061-00	•	3.3K	5% 5~	1/10W
R2503 R2504	1-216-089-91 1-216-101-00	RES,CHIP	47K 150K	5% 5%	1/10W 1/10W	R4408 R4409	1-216-059-00 1-216-059-00	RES,CHIP	2.7K 2.7K	5% 5%	1/10W 1/10W
R2551	1-216-091-00		56K	5%	1/10W	R4410 R4411	1-216-059-00 1-216-113-00	RES,CHIP	2.7K 470K	5% 5%	1/10W 1/10W
R2552 R2553	1-216-085-00 1-216-083-00	RES,CHIP	33K 27K	5% 5%	1/10W 1/10W	R4412	1-216-113-00		470K	5%	1/10W
R2555 R2556	1-216-055-00 1-216-051-00	RES,CHIP	1.8K 1.2K	5% 5%	1/10W 1/10W	R4413 R4414	1-216-295-91 1-216-295-91	SHORT	0		
R2557	1-216-067-00		5.6K	5%	1/10W	R4415 R4416	1-216-295-91 1-216-295-91		0		
R2558 R2559	1-216-057-00 1-216-039-00	RES,CHIP	2.2K 390	5% 5%	1/10W 1/10W			<variable ri<="" td=""><td>COTOTOD</td><td></td><td></td></variable>	COTOTOD		
R2560 R2561	1-216-069-00 1-216-001-00	RES,CHIP	6.8K 10	5% 5%	1/10W 1/10W	DUENI	1 222 102 00			120	
R2562	1-216-001-00		10 2.2K	5% 5%	1/10W	RV501	1-223-102-00	RES, ADJ, WIRI	SWOUND.	120	
R2563 R3301 R3302	1-216-057-00 1-216-073-00 1-216-065-91	RES,CHIP	10K 4.7K	5% 5%	1/10W 1/10W 1/10W			<transform< td=""><td>ER&gt;</td><td></td><td></td></transform<>	ER>		
R3303 R3304	1-216-065-91 1-216-065-91	RES,CHIP	4.7K 4.7K 4.7K	5% 5%	1/10W 1/10W 1/10W	T500 T501 Z		TRANSFORME TRANSFORME			
R3308	1-216-097-91		100K	5%	1/10W						
R3310 R3311	1-216-049-91 1-216-689-11	RES,CHIP	1K 39K	5% 5%	1/10W 1/10W			<thermistor< td=""><td>&gt;</td><td></td><td></td></thermistor<>	>		
R3312 R3317	1-216-095-00		82K 10K	5% 0.50%	1/10W 1/10W	TH500	1-807-970-11	THERMISTOR			
R3320	1-216-085-00		33K	5%	1/10W	; ; ; ; ;		<crystal></crystal>			
R3323 R3333	1-216-089-91 1-216-113-00		47K 470K	5% 5%	1/10W 1/10W	X101		VIBRATOR, CE			•
R3334 R3335	1-216-073-00 1-216-113-00		10 <b>K</b> 470 <b>K</b>	5% 5%	1/10W 1/10W	X300 X301		VIBRATOR, CR VIBRATOR, CR			
R3336	1-216-045-00		680	5%	1/10W						
R3337 R3338	1-216-099-00 1-216-103-00	RES, CHIP	120K 180K	5% 5%	1/10W 1/10W	******	******	******	******	*****	*****
R3339 R3346	1-216-045-00 1-216-025-91		680 100	5% 5%	1/10W 1/10W		* A-1298-297-A	A BOARD, CC	MPLETE (	20inch m	odel)
R3347	1-216-025-91		100	5%	1/10W		1 540 044 11		****		
R3348 R3349	1-216-025-91 1-216-025-91	RES, CHIP	100 100	5% 5%	1/10W 1/10W			PLATE (CF), SH	IIELD		
R3350 R3351	1-216-119-00 1-216-119-00		820K 820K	5% 5%	1/10W 1/10W		4-382-854-11	RING, SHORT SCREW (M3X10 SCREW +PSW 3		-)	
R3355	1-216-089-91 1-216-051-00		47K 1.2K	5% 5%	1/10W 1/10W			SCREW +BVTP		E2 IT_3	
R3356 R3357 R3358	1-216-051-00 1-216-051-00 1-216-051-00	RES,CHIP	1.2K 1.2K 1.2K	5% 5%	1/10W 1/10W 1/10W		7-063-003-79	SCREW +DVII	4210 111	L2 11-3	
R3359	1-216-031-00		22K	5%	1/10W			<band f<="" pass="" td=""><td>ILTER&gt;</td><td></td><td></td></band>	ILTER>		
R3360 R3361	1-216-073-00 1-216-089-91		10 <b>K</b> 47 <b>K</b>	5% 5%	1/10W 1/10W	BPF400	1-236-363-11	FILTER, BAND	PASS		
R3362 R3363	1-216-049-91 1-216-049-91	RES,CHIP	1K 1K	5% 5%	1/10W 1/10W			<capacitor></capacitor>			
R3364	1-216-073-00		10K	5%	1/10W	C105	1-163-251-11	CERAMIC CHIE	100PF	5%	50V
R3376 R3378	1-216-081-00 1-216-119-00	RES,CHIP	22K 820K	5% 5%	1/10W 1/10W	C106 C114	1-163-251-11 1-163-031-11	CERAMIC CHIE	100PF 0.01MF	5%	50V 50V
R3390 R3394	1-216-057-00 1-216-089-91	RES,CHIP	2.2K 47K	5% 5%	1/10W 1/10W	C116 C117	1-163-031-11	CERAMIC CHIE	0.01MF		50V 50V
						į					



REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
C118		CERAMIC CHIP C		5%	50V 50V	C360	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C119 C121 C123 C124	1-163-237-11 1-165-319-11 1-163-251-11	CERAMIC CHIP ( CERAMIC CHIP ( CERAMIC CHIP )	27PF 0.1MF 100PF	5% 5%	50V 50V 50V	C361 C362 C363 C364	1-163-031-11 1-163-099-00 1-163-031-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	0.01MF 18PF 0.01MF	5%	50V 50V 50V 50V
C132 C133 C134 C135 C136	1-163-251-11 1-163-251-11 1-163-251-11	CERAMIC CHIP (CERAMIC CHIP CERAMIC CHIP CERA	100PF 100PF 100PF	5% 5% 5% 5% 5%	50V 50V 50V 50V 50V	C365 C366 C367 C368	1-163-031-11 1-124-261-00	CERAMIC CHIP CERAMIC CHIP ELECT	0.01MF 10MF	10% 20% 10%	100V 50V 50V 50V 25V
C140 C141 C142 C143	1-164-161-11 1-163-259-91 1-165-319-11	CERAMIC CHIP ( CERAMIC CHIP ( CERAMIC CHIP ( CERAMIC CHIP (	0.0022MF 220PF 0.1MF	10% 10% 5%	25V 50V 50V 50V	C369 C370 C371 C372	1-104-664-11 1-104-664-11 1-163-031-11	ELECT CERAMIC CHIP	47MF 47MF 0.01MF	20% 20%	25V 25V 50V
C144 C145 C154	1-165-319-11 1-163-037-11	CERAMIC CHIP ( CERAMIC CHIP ( CERAMIC CHIP (	0.1MF 0.022MF	10%	50V 50V 50V	C373 C374 C375	1-126-960-11 1-163-259-91	CERAMIC CHIP	1MF 220PF	5% 20% 5%	50V 50V 50V
C155 C156 C157	1-163-019-00 1-163-019-00	CERAMIC CHIP ( CERAMIC CHIP ( CERAMIC CHIP (	0.0068MF 0.0068MF	10%	50V 50V 50V	C376 C377 C378 C379	1-163-809-11 1-163-031-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	0.047MF 0.01MF	20% 10% 10%	50V 25V 25V 50V
C158 C159 C161 C162 C164	1-164-344-11 1-104-664-11 1-163-141-00	CERAMIC CHIP ( CERAMIC CHIP ( CERAMIC CHIP ( CERAMIC CHIP (	0.068MF 47MF 0.001MF	10% 10% 20% 5%	25V 25V 25V 50V 50V	C380 C381 C382 C383 C384	1-163-243-11 1-104-664-11	CERAMIC CHIP CERAMIC CHIP	47PF 47MF	20% 5% 20% 5%	16V 50V 50V 25V 50V
C165 C166 C167 C168 C169	1-164-004-11 1-126-925-11 1-126-925-11		0.1MF 470MF 470MF	10% 20% 20% 10%	50V 25V 10V 10V 50V	C385 C386 C387 C388	1-104-664-11 1-124-261-00	ELECT ELECT CERAMIC CHIP	47MF 10MF	20% 20% 5% 20%	50V 25V 50V 50V 50V
C171 C172 C173	1-163-251-11 1-163-123-00	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	100PF 180PF	5% 5% 5%	50V 50V 50V	C390 C391 C392	1-163-243-11 1-104-664-11	CERAMIC CHIP	47PF 47MF	5% 20% 10%	50V 25V 25V
C174 C200 C201		CERAMIC CHIP		5% 20% 10%	50V 50V 100V	C393 C394 C395 C396	1-164-298-11 1-104-664-11 1-163-235-11	CERAMIC CHIP	0.15MF 47MF 22PF	10% 20% 5% 10%	25V 25V 50V 25V
C202 C203 C204 C205	1-163-017-00 1-126-963-11 1-126-964-11 1-126-767-11	ELECT ELECT	4.7MF 10MF 1000MF	20% 20% 20%	50V 50V 50V 16V	C397 C398 C399 C400	1-104-664-11 1-104-664-11 1-104-664-11 1-164-004-11	ELECT ELECT CERAMIC CHIP	47MF 47MF 47MF 0.1MF	20% 20% 20% 10%	25V 25V 25V 25V
C206 C207 C208 C209 C304	1-128-526-11 1-104-665-11 1-126-964-11 1-126-963-11 1-164-004-11	ELECT ELECT	100MF 100MF 10MF 4.7MF 0.1MF	20% 20% 20% 20% 10%	25V 25V 50V 50V 25V	C401 C407 C409 C411	1-104-664-11 1-163-031-11 1-164-004-11	CERAMIC CHIP	47MF 0.01MF 0.1MF	20% 10%	16V 25V 50V 25V
C305 C306 C310	1-163-031-11 1-164-004-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	0.01MF 0.1MF	5% 10%	50V 50V 25V	C414 C415 C416	1-126-964-11 1-164-232-11	CERAMIC CHIP	10MF 0.01MF	20% 10%	50V 50V
C311 C312 C313	1-126-961-11 1-163-145-00	CERAMIC CHIP	2.2MF 0.0015MF		25V 50V	C417 C418 C419 C420	1-164-182-11 1-126-925-11	CERAMIC CHIP CERAMIC CHIP ELECT CERAMIC CHIP	0.0033MF 470MF	10% 10% 20% 10%	50V 50V 10V 25V
C314 C315 C316 C318	1-163-249-11 1-126-964-11 1-104-664-11 1-126-964-11	ELECT	82PF 10MF 47MF 10MF	5% 20% 20% 20%	50V 50V 25V 50V	C421 C422 C423 C424	1-126-960-11 1-163-809-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	1MF 0.047MF	20% 10% 10%	25V 50V 25V 25V
C325 C328 C340 C343 C349	1-163-031-11 1-163-031-11	ELECT CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	0.01MF 0.01MF	<ul><li>20%</li><li>5%</li></ul>	50V 50V 50V 50V 50V	C426 C427 C429 C430 C431	1-163-031-11 1-163-031-11 1-104-661-91	CERAMIC CHIP CERAMIC CHIP ELECT CERAMIC CHIP	0.01MF 0.01MF 330MF	5% 20%	50V 50V 50V 16V 50V
C350 C352 C353 C354 C355	1-163-031-11 1-165-319-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP ELECT	0.01MF 0.1MF	5% 5% 20%	50V 50V 50V 50V 50V	C433 C434 C435 C437	1-163-235-11 1-164-004-11 1-163-089-00	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	22PF 0.1MF 6PF	5% 10% 0.25PF 10%	50V 25V
C356 C357	1-126-963-11		4.7MF	20%	50V 50V 50V	C439 C440	1-163-809-11	CERAMIC CHIP CERAMIC CHIP	0.047MF	10% 10% 10%	25V 25V 25V
C358 C359		CERAMIC CHIP		20%	50V 25V	C441 C442	1-126-962-11 1-163-809-11	ELECT CERAMIC CHIP	3.3MF 0.047MF	20% 10%	50V 25V

Les composants identifies par une trame et une marque \( \frac{\Lambda}{\text{sont}} \) sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and mark  $\triangle$  are critical for safety. Replace only with part number specified.



REF. NO.	PART NO.	DESCRIPTION		REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
C443 C444 C446	1-165-319-11	CERAMIC CHIP 39 CERAMIC CHIP 0.1 CERAMIC CHIP 12	1MF	50V 50V 50V	C520 C521 C522	1-162-114-00 1-126-768-11	ELECT	0.0047MF 2200MF	5% 20%	50V 2KV 16V
C447 C448 C449	1-163-107-00 1-163-227-11	CERAMIC CHIP 33 CERAMIC CHIP 39 CERAMIC CHIP 10	9PF 5% 9PF 0.5P		C526 /	1-107-902-11 1-136-081-11 1-162-116-91	FILM CERAMIC	1MF 0.012MF 680PF	20% 3%	50V 2KV 2KV
C450 C451 C452	1-164-004-11 1-163-263-11	CERAMIC CHIP 0.0 CERAMIC CHIP 0.1 CERAMIC CHIP 33	1MF 10% 30PF 5%	25V 50V	C529 C530 C531 C532	1-107-901-11 1-104-666-11 1-104-664-11 1-163-031-11	ELECT	0.47MF 220MF 47MF 0.01MF	20% 20% 20%	50V 25V 25V 50V
C453 C454 C455 C456	1-163-107-00 1-163-263-11	CERAMIC CHIP 0.1 CERAMIC CHIP 39 CERAMIC CHIP 33 CERAMIC CHIP 12	OPF 5% SOPF 5%	25V 50V 50V 50V	C533 C534 C537	1-102-212-00 1-107-662-11 1-126-971-11	ELECT	820PF 22MF 470MF	10% 20% 20%	500V 250V 50V
C457 C458 C459	1-163-249-11	CERAMIC CHIP 0.1 CERAMIC CHIP 82 CERAMIC CHIP 0.1	2PF 5%	25V 50V 50V	C538 C539 C540	1-137-150-11 1-130-480-00 1-163-133-00		0.01MF 0.0056MF 470PF	10% 5% 5%	100V 50V
C460 C461 C462	1-164-004-11 1-163-119-00	CERAMIC CHIP 0.1 CERAMIC CHIP 12 CERAMIC CHIP 0.1	1MF 10% 20PF 5%		C541 C542 C543 C544	1-107-905-11 1-136-481-11 1-136-481-11 1-137-150-11	ELECT MYLAR MYLAR	4.7MF 0.0022MF 0.0022MF 0.01MF	20% 10%	50V 100V 100V 100V
C463 C464 C465	1-164-004-11 1-164-299-11 1-163-231-11	CERAMIC CHIP 0.1 CERAMIC CHIP 0.2 CERAMIC CHIP 15	1MF 10% 22MF 10% 5PF 5%	25V 25V 50V	C545 C546	1-102-212-00 1-163-119-00	CERAMIC CERAMIC CHIP	820PF 120PF	10% 5%	500V 50V
C466 C467 C469	1-163-119-00 1-163-037-11	CERAMIC CHIP 12 CERAMIC CHIP 12 CERAMIC CHIP 0.0	20PF 5% 022MF 10%	50V 50V 50V	C547 C548 C549	1-102-212-00 1-107-906-11	ELECT	820PF 10MF	5% 10% 20%	50V 500V 50V
C470 C471 C472	1-163-105-00 1-163-031-11	CERAMIC CHIP 47 CERAMIC CHIP 33 CERAMIC CHIP 0.0	3PF 5% 01MF	50V 50V 50V	C550 C551 C552 C553	1-107-905-11 1-106-375-12 1-107-889-11 1-106-389-00	MYLAR ELECT MYLAR	4.7MF 0.022MF 220MF 0.082MF	20% 10% 20% 10%	50V 100V 25V 200V
C473 C475 C476 C477 C478	1-163-031-11 1-163-031-11	CERAMIC CHIP 0.0 CERAMIC CHIP 0.0 CERAMIC CHIP 0.0 CERAMIC CHIP 0.2 ELECT 10	01MF 01MF	50V 50V 50V 25V 50V	C554 C555 C556 C557	1-130-736-11 1-126-964-11 1-126-964-11 1-106-381-12	ELECT ELECT	0.01MF 10MF 10MF 0.039MF	5% 20% 20% 10%	50V 50V 50V 100V
C479 C483	1-163-249-11	CERAMIC CHIP 15 CERAMIC CHIP 82	PF 5%	50V 50V	C558 C559	1-126-960-11 1-136-173-00	FILM	1MF 0.47MF	20% 5%	50V 50V
C484 C485 C486	1-163-113-00 1-163-249-11	CERAMIC CHIP 68 CERAMIC CHIP 68 CERAMIC CHIP 82	SPF 5% PPF 5%	50V 50V 50V	C561 C564 C565 C566	1-136-159-00 1-126-964-11 1-126-960-11 1-137-150-11	ELECT ELECT MYLAR	0.033MF 10MF 1MF 0.01MF	5% 20% 20% 10%	50V 50V 50V 100V
C487 C490 C491 C492	1-164-336-11 1-164-336-11 1-164-336-11	CERAMIC CHIP 22 CERAMIC CHIP 0.3 CERAMIC CHIP 0.3 CERAMIC CHIP 0.3	33MF 33MF 33MF	50V 25V 25V 25V 50V	C567 C568 C569 C570		ELECT TANTALUM	0.047MF 1MF 3.3MF 1000MF	5% 20% 10% 20%	50V 50V 25V
C493 C494 C495	1-164-005-11 1-126-964-11		47MF 0MF 20%	25V 50V	C571 C572	1-104-709-11	CERAMIC CHIP ELECT	0.01MF 4.7MF	10% 0	16V 50V 160V
C496 C497 C498	1-163-011-11 1-126-961-11		0015MF 10% 2MF 20%	50V 50V 50V	C573 C576 C577 C578	1-136-177-00 1-102-244-00 1-107-906-11 1-136-111-00	CERAMIC ELECT FILM	1MF 220PF 10MF 1MF	5% 10% 20% 5%	50V 500V 50V 200V
C499 C500 C501 C502 C503	1-164-004-11 1-164-182-11 1-163-141-00	CERAMIC CHIP 0.0 CERAMIC CHIP 0.1 CERAMIC CHIP 0.0 CERAMIC CHIP 100 CERAMIC CHIP 100	1MF 10% 0033MF 10% 001MF 5%	50V 25V 50V 50V 50V	C579 C580 C581 C582	1-107-910-11 1-136-105-00 1-126-963-11 1-102-002-00	FILM ELECT	100MF 0.33MF 4.7MF 680PF	20% 5% 20% 10%	50V 200V 50V 500V
C504 C505 C506	1-136-495-11 1-163-199-00 1-126-959-11	CERAMIC CHIP 56	068MF 5% 50PF 5% 47MF 20%	50V 50V 50V	C583 C584 C585	1-136-541-11 1-107-949-11 1-107-960-11	ELECT	1.5MF 2.2MF 4.7MF	5% 20% 20%	200V 160V 250V
C507 C508 C509	1-128-526-11 1-130-497-00 1-128-566-11	MYLAR 0.1	00MF 20% 15MF 5% 70MF 20%	25V 50V 100V	C586 C587 C588 C589	1-126-942-61 1-102-030-00 1-107-906-11 1-102-030-00	CERAMIC ELECT	1000MF 330PF 10MF 330PF	20% 10% 20% 10%	25V 500V 50V 500V
C511 C512 C513	1-107-368-11 1-126-959-11 1-124-261-00 1-129-718-91	FILM 0.0 ELECT 0.4 ELECT 10	047MF 10% 47MF 20% 0MF 20% 022MF 5%	200V 50V 50V 630V	C590 C591 C592	1-107-903-11 1-107-365-11 1-107-635-11	ELECT FILM ELECT	2.2MF 0.015MF 4.7MF	20% 10% 20%	50V 200V 160V
C515 C516	1-102-030-00		OPF 10%	25V 500V	C593 C594	1-163-229-11	CERAMIC CHIP	12PF	5%	50V 50V
C517 C518 C519	1-107-947-11	CERAMIC CHIP 0.0 ELECT 220 CERAMIC CHIP 0.0	OMF 20%	50V 160V 50V	C595 C596 C597 C598				20% 20%	25V 25V 16V 16V



REF. NO.	PART NO.	DESCRIPTION		]	REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK	
C599	1-124-261-00	ELECT	10MF	20%	50V	C1391 C1394	1-136-165-00 1-126-967-11		0.1MF 47MF	5% 20%	50V 50V	
C1300 C1302	1-104-664-11	ELECT CERAMIC CHIP	47MF	20% 5%	25V 50V	C1394 C1395	1-126-967-11		47MF	20%	50V	
C1304 C1305	1-104-664-11 1-104-664-11	ELECT	47MF 47MF	20% 20%	25V 25V	C1396 C1397		CERAMIC CHIP CERAMIC CHIP		5%	50V 50V	
C1307		CERAMIC CHIP		2070	50V	C1398 C1399	1-124-234-00 1-104-664-11	ELECT	22MF 47MF	20% 20%	16V 25V	
C1308 C1309	1-126-933-11	ELECT CERAMIC CHIP	100MF	20% 5%	10V 50V	C1400		CERAMIC CHIP		2070	50V	
C1311 C1312	1-104-664-11		47MF	20%	25V 50V	C1401 C1402	1-136-173-00	FILM CERAMIC CHIP	0.47MF	5%	50V 50V	
C1312		CERAMIC CHIP			50V	C1402 C1403 C1404	1-136-173-00		0.47MF	5% 10%	50V 25V	
C1314 C1315	1-104-664-11 1-104-664-11		47MF 47MF	20% 20%	25V 25V	C1404		CERAMIC CHIP		5%	50V	
C1316		CERAMIC CHIP		20%	50V 25V	C1500 C1501	1-126-768-11 1-126-925-11		2200MF 470MF	20% 20%	16V 10V	
C1317 C1318	1-104-664-11		47MF	20%	25V 25V	C1505 C1506	1-136-165-00 1-104-661-91	FILM	0.1MF 330MF	5% 20%	50V 16V	
C1319	1-124-234-00		22MF 47MF	20% 20%	16V	C1507		CERAMIC CHIP		5%	50V	
C1320 C1321	1-104-664-11 1-104-664-11	ELECT	47MF 220MF	20%	25V 25V 16V	C1508 C1509	1-126-963-11 1-126-964-11		4.7MF 10MF	20% 20%	50V 50V	
C1322 C1323	1-126-934-11 1-163-031-11	CERAMIC CHIP		20%	50V	C1510	1-126-963-11		4.7MF	20% 20% 10%	50V 50V	
C1324		CERAMIC CHIP			50V	C1511 C1512	1-126-963-11		4.7MF	20%	50V	
C1325 C1326	1-104-664-11		47MF	20%	50V 25V	C1513		CERAMIC CHIP	470PF 0.0033MF	5% 5%	50V 50V	
C1327 C1328		CERAMIC CHIP CERAMIC CHIP			50V 50V	C1514 C1515	1-130-477-00 1-126-964-11		10MF	20% 10%	50V 50V	
C1329	1-126-964-11		10MF	20%	50V	C1516 C1517	1-128-526-11		100MF	20%	10V	
C1330 C1331	1-104-664-11		47MF	20%	50V 25V	C1518	1-107-909-11		47MF	20%	16V	
C1332 C1333	1-104-664-11 1-104-664-11		47MF 47MF	20% 20%	25V 25V	C1520 C1521		CERAMIC CHIP		10% 5%	2KV 50V	
C1334		CERAMIC CHIP		0.5PF	50V	C1530 C1538		CERAMIC CHIP CERAMIC CHIP		5%	50V 50V	
C1335 C1336	1-104-664-11 1-104-664-11	ELECT	47MF	20% 20%	25V 25V	C1539		CERAMIC CHIP		5%	50V	
C1338 C1339		CERAMIC CHIP CERAMIC CHIP			50V 50V	C1540 C1541	1-163-121-00	CERAMIC CHIP	150PF	5% 5%	50V 50V	
C1340		CERAMIC CHIP		E 01	50V	C1542 C2501		CERAMIC CHIP CERAMIC CHIP		5% 10%	50V 50V	
C1341 C1342	1-163-105-00	CERAMIC CHIP	33PF	5% 5%	50V 50V	C2502	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C1343 C1344		CERAMIC CHIP CERAMIC CHIP		5% 0.25PF	50V 50V	† 1 1 1		CONNECTOR				
C1345	1-124-261-00		10MF	20%	50V	CNIIOI	*1 572 070 11	<connector d<="" td=""><td></td><td>DO A D</td><td>D 11D</td></connector>		DO A D	D 11D	
C1346 C1347		CERAMIC CHIP		20%	16V 50V	CN102	* 1-564-514-11	79-11 CONNECTOR, BOARD TO BOARD 11 14-11 PLUG, CONNECTOR 11P				
C1348 C1349		CERAMIC CHIP CERAMIC CHIP		5% 5%	50V 50V	CN105	* 1-766-745-11	PLUG, CONNEC CONNECTOR, B	OARD TO	BOAR	D 12P	
C1350		CERAMIC CHIP		10%	50V	j		PLUG, CONNEC				
C1351 C1352		CERAMIC CHIP		20% 10%	50V 50V	CN301 CN302	* 1-564-510-11	PLUG, CONNEC	TOR 7P			
C1353 C1354		CERAMIC CHIP CERAMIC CHIP		5%	50V 50V	CN305 CN306	* 1-564-506-11	PIN, CONNECTO PLUG, CONNEC	TOR 3P			
C1355		CERAMIC CHIP		5%	50V	CN401		PLUG, CONNEC				
C1356 C1357	1-104-661-91		330MF	5% 20%	50V 16V	CN402 CN501	* 1-580-798-11	PLUG, CONNECTOR PI	N (DY) 6P	ADD) (	T.	
C1358 C1359	1-124-589-11 1-163-263-11	CERAMIC CHIP	47MF 330PF	20% 5%	16V 50V	CN502 CN503	* 1-573-964-11	PIN, CONNECTO PIN, CONNECTO	OR (PC BO)			
C1360		CERAMIC CHIP			50V			PLUG, CONNEC				
C1362 C1363	1-163-235-11	CERAMIC CHIP CERAMIC CHIP	22PF	5% 5%	50V 50V	CN505 CN507	1-695-915-11	PLUG, CONNECTAB (CONTACT	)		_	
C1364 C1365		CERAMIC CHIP CERAMIC CHIP		5% 0.5PF	50V 50V	CN508	1-/66-240-11	PIN, CONNECTO	OK (PC BO)	<b>чк</b> D) 2	r	
C1366	1-104-664-11		47MF	20%	25V			<composition< td=""><td>CIRCUIT</td><td>BLOCI</td><td>K&gt;</td></composition<>	CIRCUIT	BLOCI	K>	
C1367 C1372	1-104-664-11 1-104-664-11	ELECT	47MF	20% 20%	25V 25V	CP300		MODULE, TRAP				
C1373 C1374	1-104-664-11 1-104-664-11		47MF 47MF	20% 20%	25V 25V	CP301 CP302	1-808-654-21					
C1375	1-126-963-11		4.7MF	20%	50V	CP303	1-466-162-61	FILTER BLOCK,	COM (CFI	5-4)		
C1378	1-163-231-11	CERAMIC CHIP	ISPF	5%	50V							



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
		<diode></diode>		D422 D423		DIODE MA111 DIODE 1SS226	
D100 D101	8-719-800-76	DIODE MA111 DIODE 1SS226		D424		DIODE MA111	
D102 D103		DIODE 1SS226 DIODE 1SV230TPH3		D425 D427		DIODE 1SS226 DIODE MA111	
D104		DIODE 1SS226		D500 D501	8-719-404-49	DIODE MA111 B DIODE DTZ5.6B	
D105 D107	8-719 <b>-</b> 800-76	DIODE 1SS226 DIODE 1SS226		D502	8-719-979-80	DIODE UF5406	
D108 D109 D111	8-719-801-78	DIODE 1S2836 DIODE 1SS184 DIODE DTZ6.2		D503 D504	8-719-901-83	DIODE MA111 DIODE 1SS83	
D111		DIODE MA111		D505 D506 D507	8-719-033-83	DIODE RGP02-17EL-6433 DIODE ERD07-15 DIODE 1SS226	
D115 D116	8-719-977-05	DIODE DTZ6.2 DIODE MA111		D508		DIODE 1SS226	
D117 D200		DIODE 1S2076 DIODE DTZ13C		D510 D512	8-719-302-43	DIODE EL1Z DIODE UF5406	
D300 D301		DIODE 1SV232-TPH3		D513 D514		DIODE MA111 DIODE ERC38-06	
D301 D303 D304	8-719-977-05	DIODE MA111 DIODE DTZ6.2 DIODE 1SS184		D515		DIODE ERC38-06	
D305	8-719-800-76	DIODE 1SS226		D516 D517 D518	8-719-404-49	DIODE MA111 DIODE MA111 DIODE MA111	
D307 D308	8-719-404-49 8-719-404-49	DIODE MA111 DIODE MA111		D519		DIODE MAIII	
D309 D310	8-719-104-34	DIODE MA111 DIODE 1S2836		D520 D521	8-719-801-78 8-719-404-49	DIODE 1SS184 DIODE MA111	
D311 D313		DIODE 1SV230TPH3 DIODE 1SS184		D522 D523	8-719-404-49	DIODE DTZ6.2 DIODE MA111	
D314 D315	8-719-404-49	DIODE 155184 DIODE MA111 DIODE MA111		D524 D525		DIODE 10E-2 DIODE 10E-2	
D317 D320	8-719-404-49 E	DIODE MA111 DIODE MA111	-	D526 D527	8-719-404-49	DIODE 10E-2 DIODE MA111 DIODE 10E-2	
D322		DIODE MA111	*	D528 D529	8-719-300-76	DIODE RH-1A DIODE 10E-2	
D323 D324 D325	D324 8-719-404-49	19-404-49 DIODE MA111 19-404-49 DIODE MA111 19-801-78 DIODE 1SS184		D530		DIODE RH-1A	
D326		DIODE MAIII		D531 D532 D533	8-719-800-76	DIODE DTZ11B DIODE 1SS226 DIODE EL1Z	
D327 D332		DIODE 1S2836 DIODE MA111		D534		DIODE MA111	
D333 D335	8-719-404-49	DIODE MA111 DIODE MA111		D535 D536	8-719-800-76	DIODE MA111 DIODE 1SS226	
D337 D338		DIODE MA111 DIODE MA111		D538 D539	8-719-404-49	DIODE 1SS226 DIODE MA111	
D339 D344	8-719-404-49	DIODE MA111 DIODE 1SS184		D540 D541		DIODE MA111 DIODE 1SS184	
D345 D346		DIODE 1S2836 DIODE 1S2836		D543		DIODE MA111	
D347		DIODE 1S2836				<delay line=""></delay>	
D360 D361 D362	1-216-295-91 1-216-295-91 8-719-158-40		,			DELAY LINE, Y	
D363		DIODE RD10SB1				DELAY LINE, Y DELAY LINE	
D364 D365	8-719-404-49	DIODE 1S2836 DIODE MA111				<ferrite bead=""></ferrite>	
D381 D401	8-719-404-49	DIODE MA111 DIODE MA111		FB501	1-410-396-41		
D404 D405		DIODE 1SS226 DIODE 1SS184					
D406 D407	8-719-404-49	DIODE 133184 DIODE MA111 DIODE MA111		FL300	1-236-547-11	<filter></filter>	
	8-719-404-49 1 8-719-404-49 1	DIODE MA111				FILTER, BAND PASS	
	8-719-404-49					<ic></ic>	
D414 8 D415 8	8-719-801-78 I 8-719-801-78 I 8-719-801-78 I	DIODE 1SS184				IC uPD78P018FYCW-MD1	
	8-719-801-78		1	IC103	8-759-008-48	IC ST24C02FM6TR IC MC74HC86F IC uPD6451AGT-632-E2	
	8-719-801-78 I 8-719-404-49 I					IC M62358FP-E1	
			1				

The components identified by shading and mark  $\triangle$  are critical for safety. Replace only with part number specified.

Les composants identifies par une trame et une marque \( \frac{\Delta}{2} \) sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
IC106 IC107 IC108 IC109 IC110	8-759-196-70 8-759-042-02 8-759-196-70	IC M62358FP-E1 IC M62358FP-E1 IC S-80743AL-A7-S IC M62358FP-E1 IC M62358FP-E1		L305 L308 L309 L311 L312	1-410-466-41 1-410-470-11 1-410-470-11	INDUCTOR CHIP 2.2UH INDUCTOR 4.7UH INDUCTOR 10UH INDUCTOR 10UH INDUCTOR CHIP 27UH	
IC111 IC112 IC200 IC302 IC303	8-759-354-27 8-759-420-04 8-759-998-98			L314 L316 L317 L319 L320	1-412-011-31 1-410-090-41 1-408-615-31	INDUCTOR CHIP 27UH INDUCTOR CHIP 27UH INDUCTOR 18mH INDUCTOR 100UH INDUCTOR 470UH	
IC304 IC305 IC306 IC307 IC309	8-759-631-08 8-759-358-46 8-759-008-67	IC BU4053BCF IC M51279FP IC MM1114XFBE IC MC14066BF IC MM1114XFBE		L401 L402 L403 L404 L405	1-410-215-31 1-410-215-31 1-410-215-31	INDUCTOR 47UH INDUCTOR CHIP 82UH INDUCTOR CHIP 82UH INDUCTOR CHIP 82UH INDUCTOR CHIP 82UH INDUCTOR 68UH	
IC310 IC311 IC312 IC313 IC314	8-759-008-67 8-759-358-46 8-759-446-66	IC BU4053BCF IC MC14066BF IC MM1114XFBE IC MM1113XFBE IC MM1113XFBE		L406 L409 L500 L501 L502	1-410-215-31 1-459-155-00 1-407-365-00	INDUCTOR 68UH INDUCTOR CHIP 82UH COIL (WITH CORE) 45UH COIL,CHOKE COIL,CHOKE	
IC315 IC316 IC317 IC318 IC319	8-759-432-78 8-759-009-51 8-759-009-67	IC BU4053BCF IC MM1111XFBE IC MC14538BF IC MC14584BF IC MC14066BF		L503 L504 L505 L506 L507	1-410-666-31 1-410-671-31 1-459-104-00	INDUCTOR 33mH INDUCTOR 18UH INDUCTOR 47UH COIL, DUST CORE INDUCTOR 1mH	
IC320 IC321 IC322 IC323 IC324	8-759-446-66 8-759-446-66 8-759-446-66	IC MM1114XFBE IC MM1113XFBE IC MM1113XFBE IC MM1113XFBE IC MM1113XFBE		L508 L509 L510 L512 L513	1-459-087-00 1-459-106-00 1-459-232-11	INDUCTOR 27UH COIL,HCC DUST CORE 3.9mH COIL,DUST CORE INDUCTOR 0UH INDUCTOR 3.9mH	
IC325 IC326 IC327 IC350 IC402	8-759-060-00 8-759-008-67 8-759-909-71	IC MM1113XFBE IC BA10324AF IC MC14066BF IC BA4558F IC CXA1211M		L514 L515 L517	1-459-059-00	COIL, DUST CORE COIL, DUST CORE INDUCTOR 680UH	
IC404 IC405 IC407 IC408	8-759-932-67 8-759-008-67 8-759-510-73	IC CXA1739S IC BU4053BCF IC MC14066BF IC BA10393F-E2 IC BA10324AF		NL500	1-519-526-11	<neon lamp=""> LAMP, NEON  <transistor></transistor></neon>	
IC409 IC410 IC411 IC412 IC413 IC500	8-759-009-06 8-759-008-92 8-759-932-67 8-759-932-67	IC MC14052BF IC MC14024BF IC BU4053BCF IC BU4053BCF IC H8D7249		Q101 Q104 Q105 Q107 Q108	8-729-907-26 8-729-027-38 8-729-027-38	TRANSISTOR DTC144EKA-T146 TRANSISTOR IMX1 TRANSISTOR DTA144EKA-T146 TRANSISTOR DTA144EKA-T146 TRANSISTOR 2SD601A-S	
IC502 IC503 IC504 IC505 IC506	8-759-009-51 8-752-053-21 8-759-088-08	IC MC14538BF IC MC14538BF IC CXA1211M IC uPC7812AHF IC MC14538BF		Q110 Q112 Q113 Q114 Q200	8-729-422-29 8-729-422-29 8-729-422-29	TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S TRANSISTOR 2SD774-34	
IC507 IC508 IC509 IC510 IC513	8-752-053-21 8-759-998-98 8-759-009-51	IC uPC1377C IC CXA1211M IC LM358D IC MC14538BF IC MC14538BF		Q201 Q300 Q301 Q302 Q303	8-729-422-29 8-729-422-29 8-729-216-22	TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S TRANSISTOR 2SA1162-G TRANSISTOR 2SD601A-S	
JR302 JR307	1-216-295-91 1-216-295-91	SHORT 0		Q305 Q306 Q307 Q308 Q309	8-729-422-29 8-729-422-29 8-729-422-29	TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S	
JR310 L101		<coil> INDUCTOR 33UH</coil>		Q310 Q311 Q312 Q313 Q314	8-729-422-37 8-729-422-29 8-729-422-37	TRANSISTOR 2SB709A-R TRANSISTOR 2SB709A-R TRANSISTOR 2SD601A-S TRANSISTOR 2SB709A-R TRANSISTOR DTA144EKA-T146	;
L102 L104 L105 L300	1-408-619-31 1-410-482-31	INDUCTOR 47UH INDUCTOR 220UH INDUCTOR 100UH INDUCTOR 47UH		Q315 Q316 Q318 Q319	8-729-422-29 8-729-422-37	TRANSISTOR 2SB709A-R TRANSISTOR 2SD601A-S TRANSISTOR 2SB709A-R TRANSISTOR 2SD601A-S	



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
Q320	8-729-422-29	TRANSISTOR 2SD601A-S		Q430 Q431		TRANSISTOR 2 TRANSISTOR 2			
Q321 Q322	8-729-422-29	TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S		Q432		TRANSISTOR 2		701.46	
Q323 Q324 Q325	1-801-806-11	TRANSISTOR DTC144EKA-T146 TRANSISTOR DTC144EKA-T146 TRANSISTOR 2SD601A-S		Q433 Q434 Q435	8-729-422-29	TRANSISTOR D TRANSISTOR 2 TRANSISTOR D	SD601A-S		
Q326	8-729-422-29	TRANSISTOR 2SD601A-S	:	Q436 Q437	1-801-806-11	TRANSISTOR D	TC144EKA	-T146	
Q327 Q328	8-729-141-53	TRANSISTOR 2SB709A-R TRANSISTOR 2SK94-X2X3X4 TRANSISTOR 2SK94-X2X3X4		Q442 Q443		TRANSISTOR 2 TRANSISTOR 2			
Q329 Q330		TRANSISTOR 2SK94-X2X3X4 TRANSISTOR 2SB709A-R		Q444 Q445	8-729-422-29	TRANSISTOR 2 TRANSISTOR D	SD601A-S	-T146	
Q331 Q332	1-801-806-11	TRANSISTOR 2SB709A-R TRANSISTOR DTC144EKA-T146	;	Q446		TRANSISTOR D			
Q333 Q335 Q338	8-729-422-29	TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S TRANSISTOR 2SC1623-L5L6		Q447 Q448 Q449	1-801-806-11	TRANSISTOR D TRANSISTOR D TRANSISTOR D	TC144EKA	-T146	
Q339	8-729-422-37	TRANSISTOR 2SB709A-R		Q500 Q501	8-729-422-37	TRANSISTOR 2 TRANSISTOR 2	SB709A-R		
Q341 Q342 Q343	8-729-920-39	TRANSISTOR IMT1US TRANSISTOR IMT1US TRANSISTOR IMT1US		Q502 Q503		TRANSISTOR 2 TRANSISTOR 2		-MT2	
Q345	8-729-422-29	TRANSISTOR 2SD601A-S		Q505 Q506	8-729-422-29 8-729-422-29	TRANSISTOR 2 TRANSISTOR 2	SD601A-S SD601A-S	,	
Q350 Q351	8-729-422-29	TRANSISTOR 2SB709A-R TRANSISTOR 2SD601A-S		Q507		TRANSISTOR 2			
Q352 Q353 Q354	8-729-422-29	TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S		Q508 Q511 Q512	8-729-422-29	TRANSISTOR 2 TRANSISTOR 2 TRANSISTOR 2	SD601A-S		
Q355		TRANSISTOR 2SD601A-S		Q513 Q514		TRANSISTOR 2 TRANSISTOR D			
Q356 Q360 Q361	8-729-907-26	TRANSISTOR DTC144EKA-T146 TRANSISTOR IMX1 TRANSISTOR DTA144EKA-T146		Q515 Q516	8-729-106-92 1-801-806-11	TRANSISTOR 2 TRANSISTOR D	SC2690A-Q	-T146	
Q362	8-729-422-29	TRANSISTOR 2SD601A-S		Q517 Q518	8-729-027-38 1-801-806-11	TRANSISTOR D	TA144EKA TC144EKA	-T146 -T146	
Q363 Q364 Q365	1-801-806-11	TRANSISTOR 2SD601A-S TRANSISTOR DTC144EKA-T146 TRANSISTOR DTC144EKA-T146		Q519 Q520		TRANSISTOR D		-T146	
Q366 Q367	8-729-422-37	TRANSISTOR 2SB709A-R TRANSISTOR 2SB709A-R		Q522 Q523	8-729-422-29 8-729-422-29	TRANSISTOR 2 TRANSISTOR 2	SD601A-S SD601A-S		
Q368 Q369		TRANSISTOR 2SB709A-R TRANSISTOR DTA144EKA-T146	:	Q524 Q525		TRANSISTOR 2 TRANSISTOR 2			
Q372 Q373	1-801-806-11	TRANSISTOR DTC144EKA-T146 TRANSISTOR DTC144EKA-T146	•	Q533 Q534		TRANSISTOR D		-T146	•
Q380	1-801-806-11	TRANSISTOR DTC144EKA-T146	i	Q535 Q2501		TRANSISTOR 2 TRANSISTOR 2			
Q381 Q382 Q383	1-801-806-11	TRANSISTOR DTC144EKA-T146 TRANSISTOR DTC144EKA-T146 TRANSISTOR DTC144EKA-T146				<resistor></resistor>			
Q384 Q385		TRANSISTOR DTC144EKA-T146 TRANSISTOR DTC144EKA-T146		R101	1-216-025-91	RES,CHIP	100	5%	1/10W
Q386 Q401		TRANSISTOR DTC144EKA-T146 TRANSISTOR 2SD601A-S	;	R102 R103 R104	1-216-025-91 1-216-025-91 1-216-073-00	RES,CHIP	100 100 10K	5% 5% 5%	1/10W 1/10W 1/10W
Q402 Q407	8-729-422-29 8-729-422-29	TRANSISTOR 2SD601A-S TRANSISTOR 2SD601A-S		R105	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
Q409 Q410		TRANSISTOR 2SB709A-R TRANSISTOR IMX1		R106 R107 R108	1-216-065-91 1-216-065-91 1-216-065-91	RES,CHIP	4.7K 4.7K 4.7K	5% 5% 5%	1/10W 1/10W 1/10W
Q412 Q414	8-729-216-22 8-729-422-37	TRANSISTOR 2SA1162-G TRANSISTOR 2SB709A-R		R109 R110	1-216-065-91 1-216-073-00	RES,CHIP	4.7K 10K	5% 5%	1/10W 1/10W
Q415 Q416		TRANSISTOR 2SB709A-R TRANSISTOR 2SB709A-R		R113	1-216-085-00 1-216-073-00	RES,CHIP	33K 10K	5% 5%	1/10W 1/10W
Q417 Q418	8-729-422-37 8-729-120-28	TRANSISTOR 2SB709A-R TRANSISTOR 2SC1623-L5L6		R117 R119 R130	1-216-073-00 1-216-073-00 1-216-099-00	RES,CHIP	10K 10K 120K	5% 5% 5%	1/10W 1/10W 1/10W
Q419 Q420	8-729-422-37 8-729-422-37	TRANSISTOR 2SB709A-R TRANSISTOR 2SB709A-R	•	R132	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
Q421 Q422		TRANSISTOR DTC144EKA-T146 TRANSISTOR 2SC1623-L5L6	•	R134 R137 R140	1-216-065-91 1-216-065-91 1-216-033-00	RES,CHIP	4.7K 4.7K 220	5% 5% 5%	1/10W 1/10W 1/10W
Q423 Q424	8-729-422-29 1-801-806-11	TRANSISTOR 2SD601A-S TRANSISTOR DTC144EKA-T146		R141 R144	1-216-085-00 1-216-295-91	RES,CHIP	33K 0	5%	1/10W
Q425 Q426		TRANSISTOR DTC144EKA-T146 TRANSISTOR DTC144EKA-T146		R149 R151	1-216-065-91 1-216-061-00		4.7K 3.3K	5% 5%	1/10W 1/10W
Q428 Q429		TRANSISTOR 2SB709A-R TRANSISTOR 2SB709A-R		R154 R155	1-216-065-91 1-216-083-00	RES,CHIP	4.7K 27K	5% 5%	1/10W 1/10W 1/10W
				l					



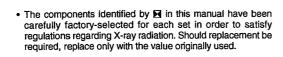
						•					
REF. NO.	PART NO.	DESCRIPTION		R	REMARK	REF. NO.	PART NO.	DESCRIPTION		į	REMARK
R157	1-216-065-91		4.7K	5%	1/10W	R357 R366	1-216-121-91 1-216-065-91	RES,CHIP	1M 4.7K	5% 5%	1/10W 1/10W
R158 R159 R160 R162 R163	1-216-295-91 1-216-063-91 1-216-061-00 1-216-065-91 1-216-065-91	RES,CHIP RES,CHIP RES,CHIP RES,CHIP	0 3.9K 3.3K 4.7K 4.7K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W	R371 R372 R373 R374 R375	1-216-647-11 1-216-073-00	RES,CHIP METAL CHIP METAL CHIP RES,CHIP	100 10K 560 680 10K 390K	5% 5% 0.50% 0.50% 5%	1/10W 1/10W 1/10W 1/10W
R164 R165 R167 R168 R169	1-216-067-00 1-216-295-91 1-216-061-00 1-216-085-00 1-216-107-00	SHORT RES,CHIP RES,CHIP RES,CHIP	5.6K 0 3.3K 33K 270K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W	R376 R378 R379 R380 R381	1-216-111-91 1-216-114-00 1-216-067-00 1-216-065-91 1-216-689-11	RES,CHIP RES,CHIP RES,CHIP RES,CHIP	510K 5.6K 4.7K 39K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
R171 R172 R177 R181 R184	1-216-031-00 1-216-295-91 1-216-214-00 1-216-065-91 1-216-649-11	SHORT RES,CHIP	180 0 4.7K 4.7K 820	5% 5% 5% 0.50%	1/10W 1/8W 1/10W 1/10W	R382 R386 R387 R388 R389	1-216-101-00 1-216-091-00 1-216-029-00 1-216-039-00	RES,CHIP RES,CHIP	150K 56K 150 390 820	5% 5% 5% 5% 0.50%	1/10W 1/10W 1/10W 1/10W 1/10W
R185 R189 R190 R192 R195	1-216-073-00 1-216-073-00 1-216-049-91 1-216-073-00 1-216-071-00	RES,CHIP RES,CHIP RES,CHIP	10K 10K 1K 10K 8.2K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R390 R393 R394 R395 R397	1-249-393-11 1-216-073-00 1-216-083-00	CARBON RES,CHIP RES,CHIP METAL CHIP	10 10K 27K 1K 470K	5% 5% 5% 0.50% 5%	1/4W F 1/10W 1/10W 1/10W 1/10W
R200 R201 R202 R203 R204	1-216-686-11 1-216-049-91 1-212-857-00 1-260-095-11 1-260-072-11	FUSIBLE CARBON	30K 1K 10 470 4.7	0.50% 5% 5% 5% 5%	1/10W 1/10W 1/4W F 1/2W 1/2W	R398	1-216-105-91 1-216-111-91 1-216-113-00 1-216-029-00 1-216-121-91	RES,CHIP RES,CHIP RES,CHIP	220K 390K 470K 150 1M	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
R205 R206 R207 R208 R209	1-216-647-11 1-216-073-00 1-216-065-91 1-216-073-00	RES,CHIP RES,CHIP	680 10K 4.7K 4.7K 10K	0.50% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R406 R407 R408 R410 R411	1-216-083-00 1-216-085-00	RES,CHIP RES,CHIP METAL CHIP RES,CHIP	27K 33K 39K 6.8K 220	5% 5% 0.50% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
R210 R211 R302 R304 R307	1-216-061-00 1-249-393-11 1-216-025-91 1-216-025-91 1-216-115-00	CARBON RES,CHIP RES,CHIP	3.3K 10 100 100 560K	5% 5% 5% 5% 5%	1/10W 1/4W F 1/10W 1/10W 1/10W	R414 R416 R417 R418	1-216-121-91 1-216-295-91 1-216-113-00 1-216-665-11	RES,CHIP SHORT	1M 0 470K 3.9K 4.7K	5% 5% 0.50% 0.50%	1/10W 1/10W 1/10W 1/10W
R308 R311 R312 R313 R314	1-216-065-91 1-216-055-00 1-216-073-00 1-216-648-11 1-216-099-00	RES,CHIP RES,CHIP METAL CHIP	4.7K 1.8K 10K 750 120K	5% 5% 5% 0.50% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R426 R428 R429 R430 R431	1-216-039-00 1-216-097-91 1-216-073-00 1-216-119-00 1-216-097-91	RES,CHIP RES,CHIP RES,CHIP	390 100K 10K 820K 100K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
R315 R316 R317 R318 R320	1-216-099-00 1-216-049-91 1-216-057-00 1-216-049-91 1-216-057-00	RES,CHIP RES,CHIP RES,CHIP	120K 1K 2.2K 1K 2.2K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R434 R435 R436 R437 R441	1-216-109-00 1-216-105-91 1-216-113-00 1-216-097-91	RES,CHIP RES,CHIP RES,CHIP	330K 220K 470K 100K 560	5% 5% 5% 5% 0.50%	1/10W 1/10W 1/10W 1/10W 1/10W
R321 R322 R323 R324 R325	1-216-051-00 1-216-035-00 1-216-109-00 1-216-101-00 1-216-037-00	RES,CHIP RES,CHIP RES,CHIP	1.2K 270 330K 150K 330	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R442 R443 R444 R445 R447		METAL CHIP RES,CHIP RES,CHIP RES,CHIP	680 1K 220K 82K 6.8K	0.50% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
R326 R328 R329 R330 R331	1-216-033-00 1-216-121-91 1-216-055-00 1-216-089-91 1-216-093-00	RES,CHIP RES,CHIP RES,CHIP	220 1M 1.8K 47K 68K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R449 R451 R452 R453 R459	1-216-073-00 1-216-037-00 1-216-651-11 1-216-097-91	RES,CHIP RES,CHIP METAL CHIP	10K 330 1K 100K 820	5% 5% 0.50% 5% 0.50%	1/10W 1/10W 1/10W 1/10W 1/10W
R332 R333 R334 R335 R336	1-216-097-91 1-216-097-91 1-216-093-00 1-216-083-00 1-216-065-91	RES,CHIP RES,CHIP RES,CHIP	100K 100K 68K 27K 4.7K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R460 R462 R463 R464 R465	1-216-295-91	SHORT  METAL CHIP RES,CHIP RES,CHIP	0 1K 3.9K 4.7K 100	0.50% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W
R342 R345 R346 R349 R350	1-216-065-91 1-216-063-91 1-216-057-00 1-216-694-11 1-216-085-00	RES,CHIP RES,CHIP METAL CHIP	4.7K 3.9K 2.2K 62K 33K	5% 5% 5% 0.50% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R466 R468 R469 R471	1-216-077-00 1-216-105-91 1-216-063-91 1-216-109-00	RES,CHIP RES,CHIP RES,CHIP RES,CHIP	15K 220K 3.9K 330K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W
R351 R354	1-216-061-00 1-216-119-00		3.3K 820K	5% 5%	1/10W 1/10W	R472 R473	1-216-077-00 1-216-121-91		15K 1M	5% 5%	1/10W 1/10W



REF. NO.	PART NO.	DESCRIPTION		Į	REMARK	REF. NO.	PART NO.	DESCRIPTION		Ŗ	REMARK
R476 R477	1-216-061-00 1-216-061-00		3.3K 3.3K	5% 5%	1/10W 1/10W	R549	1-216-677-11	METAL CHIP	12K	0.50%	1/10W
R478 R479 R482	1-216-073-00 1-216-085-00 1-216-057-00	RES,CHIP RES,CHIP RES,CHIP	10K 33K 2.2K	5% 5% 5%	1/10W 1/10W 1/10W	R550 R551 R552 R553	1-216-053-00 1-216-077-00 1-216-033-00 1-216-083-00	RES,CHIP RES,CHIP RES,CHIP	1.5K 15K 220 27K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
R483 R484 R485 R486 R487	1-216-033-00 1-216-681-11	METAL CHIP	100 1K 220 18K 1.2K	5% 0.50% 5% 0.50% 0.50%	1/10W 1/10W 1/10W 1/10W 1/10W	R554 R555 R556 R557 R558	1-215-897-11 1-216-462-00	METAL CHIP METAL OXIDE METAL OXIDE METAL OXIDE		5% 0.50% 5% 5% 5%	1/10W 2W F 2W F 2W F
R488 R489 R491 R492 R493	1-216-073-00 1-216-077-00 1-216-063-91 1-216-085-00 1-216-295-91	RES,CHIP RES,CHIP RES,CHIP	10K 15K 3.9K 33K 0	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W	R559 R560 R561 R562 R563	1-216-109-00 1-216-091-00 1-216-049-91 1-247-692-11 1-216-017-91	RES,CHIP RES,CHIP CARBON	330K 56K 1K 22 47	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/4W F 1/10W
R494 R495 R496 R497 R498	1-216-651-11 1-216-073-00	METAL CHIP	75K 1K 10K 1.2K 3.9K	0.50% 0.50% 5% 0.50% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R564 R565 R566 R567 R568	1-216-107-00 1-216-033-00	RES,CHIP RES,CHIP METAL CHIP RES,CHIP	270K 220 27K 22K 10K	5% 5% 0.50% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
R499 R500 R501 R502 R503		RES,CHIP	220 39K 15K 12K 12K	5% 5% 5% 0.50% 0.50%	1/10W 1/10W 1/10W 1/10W 1/10W	R569 R571 R572 R573 R575	1-260-119-11 1-216-065-91 1-216-059-00 1-216-071-00 1-249-383-11	CARBON RES,CHIP RES,CHIP RES,CHIP	47K 4.7K 2.7K 8.2K 1.5	5% 5% 5% 5%	1/2W 1/10W 1/10W 1/10W 1/4W F
R504 R505 R506 R507 R508	1-216-111-91 1-216-067-00 1-216-073-00 1-216-083-00 1-216-105-91	RES,CHIP RES,CHIP RES,CHIP	390K 5.6K 10K 27K 220K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R576 R578 R579 R580 R582	1-216-101-00	RES,CHIP METAL CHIP RES,CHIP RES,CHIP	150K 56K 15K 220K 33K	5% 0.50% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
R509 R510 R511 R512 R513	1-216-089-91 1-216-097-91 1-216-099-00 1-216-055-00 1-216-295-91	RES,CHIP RES,CHIP RES,CHIP	47K 100K 120K 1.8K 0	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W	R583 R584 R585 R586 R587		RES,CHIP	390 10K 220 30K 10K	5% 5% 0.50% 0.50%	1/10W 1/10W 1/10W 1/10W 1/10W
R514 R515 R516 R517 R518	1-216-295-91 1-216-675-11 1-216-097-91 1-214-896-81 1-260-123-11	METAL CHIP RES,CHIP METAL	0 10K 100K 20K 100K	0.50% 5% 1% 5%	1/10W 1/10W 1/2W 1/2W	R588 R589 R590 R591 R592	1-216-077-00 1-216-067-00 1-216-081-00	RES,CHIP RES,CHIP RES,CHIP METAL CHIP	15K 5.6K 22K 20K 10	5% 5% 5% 0.50% 5%	1/10W 1/10W 1/10W 1/10W 1/4W F
R519 R520 R521 R523 R524	1-216-017-91 1-249-423-11 1-216-065-91 1-215-892-11 1-216-093-00	CARBON RES,CHIP METAL OXIDE	47 3.3K 4.7K 1K 68K	5% 5% 5% 5% 5%	1/10W 1/4W F 1/10W 2W F 1/10W	R593 R594 R595 R596 R597		METAL CHIP CARBON RES,CHIP METAL	680 1K 39K 11K 1K	0.50% 5% 5% 1% 5%	1/10W 1/4W 1/10W 1/4W 1/4W F
R525 R526 R527 R528 R529	1-216-069-00 1-216-089-91 1-216-089-91 1-216-089-91 1-216-089-91	RES,CHIP RES,CHIP RES,CHIP	6.8K 47K 47K 47K 47K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R598 R599 R1103 R1104 R1105	1-216-085-00 1-216-645-11 1-216-077-00	RES,CHIP METAL CHIP RES,CHIP METAL CHIP	33K 560 15K 100K 10K	5% 0.50% 5% 0.50% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
R530 R531 R532 R533 R534	1-216-077-00	METAL OXIDE CARBON	15K	5% 5% 5% 5% 5%	2W F 1/10W 3W F 1/4W F 1/10W	R1106 R1107	1-216-097-91 1-216-059-00	RES,CHIP RES,CHIP METAL CHIP RES,CHIP	100K 2.7K 18K 22K 8.2K	5% 5% 0.50% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
R535 R536 R537 R538 R539	1-249-448-11 1-216-101-00 1-216-089-91 1-215-916-00 1-216-065-91	RES,CHIP RES,CHIP METAL OXIDE	1.2 150K 47K 680 4.7K	5% 5% 5% 5% 5%	1/4W F 1/10W 1/10W 3W F 1/10W	R1125 R1126	1-216-049-91 1-216-041-00 1-216-065-91 1-216-071-00 1-216-049-91	RES,CHIP RES,CHIP RES,CHIP RES,CHIP RES,CHIP	1K 470 4.7K 8.2K 1K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W
R540 R541 R542 R543 R544	1-216-113-00 1-249-383-11 1-216-057-00 1-212-883-00 1-216-095-00	CARBON RES,CHIP FUSIBLE	470K 1.5 2.2K 120 82K	5% 5% 5% 5% 5%	1/10W 1/4W F 1/10W 1/4W F 1/10W	R1131 R1132	1-216-049-91 1-216-071-00 1-216-069-00 1-216-073-00 1-216-097-91	RES,CHIP RES,CHIP RES,CHIP RES,CHIP	1K 8.2K 6.8K 10K 100K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W
R545 R546 R547 R548	1-216-073-00 1-249-425-11 1-216-091-00 1-216-057-00	CARBON RES,CHIP	10K 4.7K 56K 2.2K	5% 5% 5% 5%	1/10W 1/4W F 1/10W 1/10W	R1139 R1140 R1141	1-216-055-00	RES,CHIP METAL CHIP	1.8K 1.2K 10K	5% 0.50% 5%	1/10W 1/10W 1/10W



REF. NO.	PART NO.	DESCRIPTION		F	REMARK	REF. NO.	PART NO.	DESCRIPTION		F	REMARK
R1142 R1143 R1146		METAL CHIP METAL CHIP RES,CHIP	1.2K 1.2K 2.2K	0.50% 0.50% 5%	1/10W 1/10W 1/10W	R1338 R1339 R1340 R1341	1-216-647-11 1-216-033-00 1-216-033-00 1-216-033-00	RES,CHIP	680 220 220 220	0.50% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W
R1147 R1150 R1151 R1155 R1163	1-216-057-00 1-216-037-00 1-216-081-00 1-216-133-00 1-216-033-00	RES,CHIP RES,CHIP RES,CHIP	2.2K 330 22K 3.3M 220	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R1342 R1343 R1344 R1345	1-216-083-00 1-216-037-00 1-216-093-00 1-216-109-00	RES,CHIP RES,CHIP RES,CHIP	27K 330 68K 330K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W
R1164 R1165 R1170	1-216-049-91 1-216-049-91 1-216-089-91	RES,CHIP	1K 1K 47K	5% 5% 5%	1/10W 1/10W 1/10W	R1346 R1347 R1348	1-216-097-91 1-216-073-00 1-216-071-00	RES,CHIP	100K 10K 8.2K	5% 5% 5%	1/10W 1/10W 1/10W
R1171 R1172 R1174	1-216-085-00 1-216-085-00 1-216-089-91	RES,CHIP RES,CHIP	33K 33K 47K	5% 5% 5%	1/10W 1/10W 1/10W	R1349 R1350 R1351 R1352	1-216-035-00 1-216-073-00 1-216-033-00 1-216-025-91	RES,CHIP RES,CHIP RES,CHIP	270 10K 220 100	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W
R1177 R1179 R1180 R1182	1-216-071-00 1-216-041-00 1-216-089-91 1-216-131-11	RES,CHIP RES,CHIP RES,CHIP	8.2K 470 47K 2.7M	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W	R1353 R1354 R1355	1-216-065-91 1-216-089-91 1-216-033-00	RES,CHIP RES,CHIP	4.7K 47K 220	5% 5% 5%	1/10W 1/10W 1/10W
R1183 R1184 R1185	1-216-071-00 1-216-131-11 1-216-071-00	RES,CHIP RES,CHIP	8.2K 2.7M 8.2K	5% 5% 5%	1/10W 1/10W 1/10W	R1356 R1357 R1358	1-216-105-91 1-216-101-00 1-216-071-00	RES,CHIP RES,CHIP	220K 150K 8.2K	5% 5% 5%	1/10W 1/10W 1/10W
R1186 R1187 R1188	1-216-131-11 1-216-071-00 1-216-131-11	RES,CHIP RES,CHIP	2.7M 8.2K 2.7M	5% 5%	1/10W 1/10W 1/10W	R1359 R1360 R1361 R1362	1-216-099-00 1-216-065-91 1-216-113-00	RES,CHIP RES,CHIP	120K 4.7K 470K 11K	5% 5% 5% 0.50%	1/10W 1/10W 1/10W 1/10W
R1189 R1190 R1191 R1192	1-216-071-00 1-216-131-11 1-216-071-00 1-216-131-11	RES,CHIP RES,CHIP RES,CHIP	8.2K 2.7M 8.2K 2.7M	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W	R1363 R1364 R1365 R1366	1-216-113-00 1-216-073-00 1-216-131-11 1-216-081-00	RES,CHIP RES,CHIP	470K 10K 2.7M 22K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W
R1193 R1194 R1195 R1196	1-216-025-91 1-216-085-00 1-216-025-91 1-216-085-00	RES,CHIP RES,CHIP	100 33K 100 33K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W	R1367 R1368 R1369		METAL CHIP RES,CHIP	2.4K 2.7K 1.2K	0.50% 5% 5%	1/10W 1/10W 1/10W 1/10W
R1197 R1198 R1303	1-216-025-91 1-216-085-00 1-216-073-00	RES,CHIP RES,CHIP	100 33K 10K	5% 5% 5%	1/10W 1/10W 1/10W	R1370 R1371 R1372	1-216-105-91 1-216-113-00 1-216-089-91	RES,CHIP RES,CHIP	220K 470K 47K	5% 5% 5%	1/10W 1/10W 1/10W
R1304 R1305 R1306		RES,CHIP METAL CHIP	39 <b>K</b> 220 560	5% 5% 0.50%	1/10W 1/10W 1/10W	R1373 R1374 R1375 R1376	1-216-647-11	RES,CHIP METAL CHIP METAL CHIP	3.9K 150K 560 680	5% 5% 0.50% 0.50%	1/10W 1/10W 1/10W 1/10W
R1307 R1308 R1309 R1310 R1311	1-216-091-00 1-216-645-11 1-216-025-91 1-216-057-00 1-216-089-91	METAL CHIP RES,CHIP RES,CHIP	56K 560 100 2.2K 47K	5% 0.50% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R1378 R1379 R1380 R1381	1-216-647-11	RES,CHIP METAL CHIP METAL CHIP	4.7K 330 560 680	5% 5% 0.50% 0.50%	1/10W 1/10W 1/10W 1/10W
R1312 R1313 R1314	1-216-027-00 1-216-097-91 1-216-081-00	RES,CHIP RES,CHIP	120 100K 22K	5% 5% 5%	1/10W 1/10W 1/10W	R1382 R1383 R1384	1-216-091-00	METAL CHIP RES,CHIP	10K 18K 56K	5% 0.50% 5%	1/10W 1/10W 1/10W
R1315 R1316 R1317	1-216-073-00 1-216-065-91 1-216-033-00	RES,CHIP RES,CHIP	10K 4.7K 220	5% 5% 5%	1/10W 1/10W 1/10W	R1385 R1386 R1387 R1388			10K 15K 1.2K 39K	5% 5% 0.50% 0.50%	1/10W 1/10W 1/10W 1/10W
R1318 R1319 R1320 R1321		RES,CHIP RES,CHIP METAL CHIP	47K 33K 2.2K 820	5% 5% 5% 0.50%	1/10W 1/10W 1/10W 1/10W	R1389 R1390 R1391 R1392	1-216-647-11 1-216-025-91 1-216-041-00	RES,CHIP	1.8K 680 100 470	0.50% 0.50% 5% 5%	1/10W 1/10W 1/10W 1/10W
R1322 R1324 R1325 R1326 R1327	1-216-057-00 1-216-061-00 1-216-652-11 1-216-073-00 1-216-073-00	RES,CHIP METAL CHIP RES,CHIP	2.2K 3.3K 1.1K 10K 10K	5% 5% 0.50% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	R1393 R1394 R1395 R1396	1-216-063-91 1-216-041-00 1-216-071-00 1-216-071-00	RES,CHIP RES,CHIP	3.9K 470 8.2K 8.2K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W
R1328 R1329 R1330	1-216-125-00 1-216-103-00 1-216-081-00	RES,CHIP RES,CHIP	1.5M 180K 22K	5% 5% 5%	1/10W 1/10W 1/10W	R1397 R1399 R1401	1-216-065-91 1-216-073-00 1-216-085-00	RES,CHIP	4.7K 10K 33K	5% 5%	1/10W 1/10W 1/10W
R1331 R1332 R1333	1-216-679-11	METAL CHIP METAL CHIP	15K 6.8K	0.50% 0.50% 5%	1/10W 1/10W 1/10W	R1402 R1403 R1404 R1405	1-216-295-91 1-216-651-11	SHORT METAL CHIP METAL CHIP	0 1K 18K 8.2K	0.50% 0.50% 5%	1/10W 1/10W 1/10W
R1334 R1335 R1336 R1337	1-216-063-91 1-249-401-11 1-216-095-00 1-216-061-00	RES,CHIP CARBON RES,CHIP	3.9K 47 82K 3.3K	5% 5% 5% 5%	1/10W 1/4W F 1/10W 1/10W			METAL CHIP RES,CHIP RES,CHIP	1.2K 3.9K 470K 0	0.50% 5% 5%	1/10W 1/10W 1/10W



Les composants identifies par une trame et une marque ∆ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and mark ∆ are critical for safety.
Replace only with part number specified.

						,,,,,,						
REF. NO.	PART NO.	DESCRIPTION		R	EMARK	REF. NO.	PART NO.	DESCRIPTION		F	REMARK	
R1410	1-216-053-00	RES,CHIP	1.5K	5%	1/10W	R1480 R1481	1-216-089-91 1-216-115-00		47K 560K	5% 5%	1/10W 1/10W	
R1411	1-216-073-00		10K	5%	1/10W	R1482	1-216-089-91		47K	5%	1/10W	
R1412 R1413	1-216-107-00 1-216-081-00		270K 22K	5% 5%	1/10W 1/10W	R1483	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R1414 R1415	1-216-057-00 1-216-093-00		2.2K 68K	5% 5%	1/10W 1/10W	R1484 R1485	1-216-081-00 1-216-113-00		22 <b>K</b> 470 <b>K</b>	5% 5%	1/10W 1/10W	
						R1486	1-216-097-91	RES,CHIP	100 <b>K</b>	5%	1/10W	
R1416 R1417	1-216-113-00 1-216-033-00		470K 220	5% 5%	1/10W 1/10W	R1487	1-216-097-91	RES,CHIP	100K	5%	1/10W	
R1418 R1419	1-216-033-00 1-216-025-91		220 100	5% 5%	1/10W 1/10W	R1488 R1490	1-216-083-00 1-216-035-00		27K 270	5% 5%	1/10W 1/10W	
R1420	1-216-089-91		47K	5%	1/10W	R1491	1-216-035-00	RES,CHIP	270	5%	1/10W	
R1421		METAL CHIP	820	0.50%	1/10W	R1492 R1493	1-216-035-00 1-216-083-00		270 27 <b>K</b>	5% 5%	1/10W 1/10W	
R1422 R1423	1-216-085-00 1-216-057-00		33K 2.2K	5% 5%	1/10W 1/10W	R1494	1-216-081-00	RES.CHIP	22K	5%	1/10W	
R1424	1-216-081-00	RES,CHIP	22K	5%	1/10W 1/10W	R1495 R1496	1-216-089-91 1-216-089-91	RES,CHIP	47K 47K	5% 5%	1/10W 1/10W	
R1425	1-216-013-00		33	5%		R1498	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	
R1426 R1427	1-216-113-00 1-216-681-11	RES,CHIP METAL CHIP	470K 18K	5% 0.50%	1/10W 1/10W	R1500	1-216-649-11	METAL CHIP	820	0.50%	1/10W	
R1428	1-216-061-00		3.3K 5.1K	5% 0.50%	1/10W 1/10W	R1501 R1502	1-216-071-00 1-260-111-11		8.2K 10K	5% 5%	1/10W 1/2W	
R1429 R1430	1-216-073-00		10K	5%	1/10W	R1503	1-216-063-91	RES,CHIP	3.9K	5%	1/10W	
R1431	1-216-129-00	RES.CHIP	2.2M	5%	1/10W	R1504 R1505	1-216-686-11	METAL CHIP CARBON	30K 10	0.50% 5%	1/10W 1/4W	F
R1432 R1433	1-216-089-91 1-216-085-00	RES,CHIP	47K 33K	5% 5%	1/10W 1/10W	R1506	1-216-041-00	RES CHIP	470	5%	1/10W	
R1434	1-216-645-11	METAL CHIP	560	0.50%	1/10W	R1507	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	
R1435	1-216-055-00	RES,CHIP	1.8K	5%	1/10W	R1508 R1510	1-216-689-11 1-216-077-00	RES,CHIP	39K 15K	5% 5%	1/10W 1/10W	
R1436 R1437	1-216-073-00 1-216-069-00		10 <b>K</b> 6.8 <b>K</b>	5% 5%	1/10W 1/10W	R1511	1-216-360-11	METAL OXIDE	8.2	5%	1W	F
R1438	1-216-073-00	RES,CHIP	10K	5%	1/10W	R1512		METAL CHIP	680 1K	0.50% 5%	1/10W 1/2W	17
R1439 R1440	1-216-059-00 1-216-041-00		2.7K 470	5% 5%	1/10W 1/10W	R1513 R1514	1-247-752-11 1-247-711-11	CARBON	680	5%	1/4W	F
R1441	1-216-033-00	RES.CHIP	220	5%	1/10W	R1515 R1517	1-216-350-11 1-216-109-00	METAL OXIDE RES,CHIP	1.2 330K	5% 5%	1W 1/10W	F
R1442	1-216-073-00	RES,CHIP	10K 33	5% 5%	1/10W 1/10W	R1518		METAL OXIDE	470	5%	1W	F
R1443 R1444	1-216-013-00 1-216-057-00		2.2K	5%	1/10W	R1519	1-216-355-11	METAL OXIDE	3.3	5%	1W	F
R1445	1-216-071-00	RES,CHIP	8.2K	5%	1/10W	R1520 R1521	1-216-027-00 1-216-029-00		120 150	5% 5%	1/10W 1/10W	
R1446	1-216-071-00 1-216-081-00	RES,CHIP	8.2K 22K	5% 5%	1/10W 1/10W	R1523	1-216-350-11	METAL OXIDE	1.2	5%	1W	F
R1447 R1448	1-216-085-00	RES,CHIP	33K	5%	1/10W	R1524		METAL OXIDE		5%		F
R1449 R1450	1-216-057-00 1-216-129-00		2.2K 2.2M	5% 5%	1/10W 1/10W	R1525 R1526	1-216-083-00 1-216-089-91	RES,CHIP	27K 47K	5% 5%	1/10W 1/10W	
R1451	1-216-093-00	RES CHIP	68K	5%	1/10W	R1527 R1528	1-249-413-11 1-215-869-11	CARBON METAL OXIDE	470 1K	5% 5%	1/4 <b>W</b> 1W	F F
R1452	1-216-085-00	RES,CHIP	33 <b>K</b>	5%	1/10W				8.2K	20%	1/2W	_
R1453 R1454	1-216-013-00 1-216-065-91	RES,CHIP	33 4.7K	5% 5%	1/10W 1/10W	R1529' R1530	1-202-829-11 1-216-115-00	RES,CHIP	560 <b>K</b>	5%	1/10W	
R1455	1-216-113-00	RES,CHIP	470K	5%	1/10W	R1531 R1532	1-247-697-11 1-216-059-00		56 2.7K	5% 5%	1/4W 1/10W	F
R1456	1-216-129-00	RES,CHIP	2.2M	5%	1/10W 1/10W	R1533	1-249-414-11		560	5%	1/4W	F
R1457 R1458	1-216-089-91 1-216-085-00	RES,CHIP	47K 33K	5% 5%	1/10W	R1534		METAL CHIP	2.2K	0.50%	1/10W	Sasa.
R1459 R1460	1-216-133-00 1-216-097-91		3.3M 100K	5% 5%	1/10W 1/10W	■R1536 / R1537	∆ 1-249-389-11	METAL CHIP CARBON	4.7	5%	1/10W 1/4W	F
		METAL CHIP	560	0.50%	1/10W	R1538 R1540	1-216-073-00 1-216-105-91	RES,CHIP	10K 220K	5% 5%	1/10W 1/10W	
R1461 R1462	1-216-645-11	METAL CHIP	560	0.50%	1/10W							
R1463 R1464	1-216-645-11 1-216-057-00	METAL CHIP RES.CHIP	560 2.2 <b>K</b>	0.50% 5%	1/10W 1/10W	R1541 R1543	1-216-081-00 1-216-027-00		22K 120	5% 5%	1/10W 1/10W	
R1465	1-216-097-91		100K	5%	1/10W	R1547 R1548	1-216-391-11 1-216-057-00	METAL OXIDE	1.5 2.2K	5% 5%	3W 1/10W	F
R1466	1-216-055-00		1.8K	5%	1/10W	R1549	1-260-094-11		390	5%	1/2W	
R1467 R1468	1-216-073-00 1-216-091-00	RES,CHIP	10K 56K	5% 5%	1/10W 1/10W	R1550	1-216-105-91		220K	5%	1/10W	
R1469 R1470	1-216-057-00 1-216-061-00	RES,CHIP	2.2K 3.3K	5% 5%	1/10W 1/10W	R1551 R1552	1-249-393-11 1-216-091-00		10 56K	5% 5%	1/4W 1/10W	F
						R1553	1-216-091-00	RES,CHIP	56K	5%	1/10W	
R1471 R1472	1-216-049-91 1-216-085-00	RES,CHIP	1K 33K	5% 5%	1/10W 1/10W	R1554	1-216-059-00		2.7K	5%	1/10W	
R1473 R1475	1-216-081-00	RES,CHIP METAL CHIP	22K 12K	5% 0.50%	1/10W 1/10W	R1555 R1556	1-216-295-91 1-216-071-00		0 8.2K	5%	1/10W	
R1476	1-216-063-91		3.9K	5%	1/10W	R1557	1-218-760-11	METAL CHIP	220K 10	0.50%	1/10W 1/4W	E
R1477	1-216-057-00		2.2K	5%	1/10W	R1558 R1559	1-249-393-11 1-249-393-11		10	5% 5%	1/4W 1/4W	F
R1478	1-216-061-00	RES,CHIP	3.3K	5%	1/10W	i i i i						



REF. NO.	PART NO.	DESCRIPTION		I	REMARK	REF. NO.	PART NO.	DESCRIPTION		I	REMARK
R1560	1-216-049-91		1K	5%	1/10W	R2352	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R1561 R1562	1-216-097-91 1-216-089-91	RES,CHIP	100K 47K	5% 5%	1/10W 1/10W	R2353	1-216-041-00		470	5%	1/10W
R1563 R1565	1-216-089-91 1-216-113-00		47K 470K	5% 5%	1/10W 1/10W	R2354 R2358	1-216-025-91 1-216-025-91	RES,CHIP	100 100	5% 5%	1/10W 1/10W
R1567	1-216-089-91		47K	5%	1/10W	R2361 R2362	1-216-099-00 1-216-081-00		120K 22K	5% 5%	1/10W 1/10W
R1570 R1571	1-216-073-00 1-216-103-00		10K 180K	5% 5%	1/10W 1/10W	R2363	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1572 R1573	1-216-101-00 1-216-073-00		150K 10K	5% 5%	1/10W 1/10W	R2364 R2365	1-216-025-91 1-216-687-11	RES,CHIP METAL CHIP	100 33 <b>K</b>	5% 0.50%	1/10W 1/10W
R1574	1-216-041-00	•	470	5%	1/10W	R2366 R2367	1-216-067-00 1-216-097-91		5.6K 100K	5% 5%	1/10W 1/10W
R1575 R1576	1-216-025-91 1-216-025-91		100 100	5% 5%	1/10W 1/10W	R2368	1-216-065-91	RES.CHIP	4.7K	5%	1/10W
R1577 R1578	1-216-025-91 1-216-065-91	RES,CHIP	100 4.7K	5% 5%	1/10W 1/10W	R2369 R2371		METAL CHIP	10 <b>K</b> 1 <b>K</b>	0.50% 5%	1/10W 1/10W
R1579		METAL CHIP	39K	0.50%	1/10W	R2372 R2374	1-216-113-00 1-216-097-91	RES,CHIP	470K 100K	5% 5%	1/10W 1/10W
R1595 R1596	1-216-041-00 1-216-099-00	RES,CHIP	470 120K	5% 5%	1/10W 1/10W	R2375	1-216-089-91		47K	5%	1/10W
R2300	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	R2376	1-216-089-91	RES,CHIP	47K	5%	1/10W
R2301	1-216-065-91	•	4.7K	5%	1/10W	R2377 R2378	1-216-033-00 1-216-089-91	RES,CHIP	220 47K	5% 5%	1/10W 1/10W
R2302 R2303	1-216-093-00		6.8K 68K	0.50% 5%	1/10W 1/10W	R2379	1-216-033-00	,	220	5%	1/10W
R2304 R2305	1-216-105-91 1-216-085-00	RES,CHIP	220K 33K	5% 5%	1/10W 1/10W	R2380 R2381	1-216-089-91 1-216-089-91	RES,CHIP	47K 47K	5% 5%	1/10W 1/10W
R2306	1-216-089-91	RES,CHIP	47K	5%	1/10W	R2382 R2383	1-216-089-91 1-216-033-00		47K 220	5% 5%	1/10W 1/10W
R2307 R2308	1-216-033-00 1-216-103-00		220 180K	5% 5%	1/10W 1/10W	R2384	1-216-689-11	RES,CHIP	39K	5%	1/10W
R2309 R2310	1-216-049-91 1-216-095-00		1K 82K	5% 5%	1/10W 1/10W	R2389 R2390	1-216-033-00 1-216-647-11	RES,CHIP METAL CHIP	220 680	5% 0.50%	1/10W 1/10W
R2311	1-216-073-00		10 <b>K</b>	5%	1/10W	R2391 R2392		METAL CHIP	680 10 <b>K</b>	0.50% 5%	1/10W 1/10W
R2312 R2313	1-216-053-00 1-216-049-91		1.5K 1K	5% 5%	1/10W 1/10W	R2393	1-216-073-00		10K	5%	1/10W
R2314 R2315	1-216-645-11	METAL CHIP METAL CHIP	560 15K	0.50% 0.50%	1/10W 1/10W	R2394 R2396	1-216-081-00 1-216-041-00		22K 470	5% 5%	1/10W 1/10W
R2316	1-216-081-00		22K	5%	1/10W	R2397 R2398	1-216-113-00 1-216-109-00	RES,CHIP	470K 330K	5% 5%	1/10W 1/10W
R2317 R2318	1-216-049-91 1-216-069-00		1K 6.8K	5% 5%	1/10W 1/10W	R2399	1-216-073-00		10K	5%	1/10W
R2319	1-216-093-00	RES,CHIP	68K 12K	5% 0.50%	1/10W 1/10W 1/10W	R2501 R2502	1-216-083-00 1-216-085-00		27K 33K	5% 5%	1/10W 1/10W
R2320 R2321	1-216-057-00	METAL CHIP RES,CHIP	2.2K	5%	1/10W	R2503	1-216-097-91	RES,CHIP	100K	5%	1/10W 1/10W 1/10W
R2322	1-216-065-91		4.7K	5%	1/10W	R2504 R2505	1-216-101-00 1-216-113-00		150K 470K	5% 5%	1/10W
R2323 R2324	1-216-073-00		22K 10K	0.50% 5%	1/10W 1/10W	R2506	1-216-099-00		120K	5%	1/10W
R2325 R2326	1-216-063-91 1-216-041-00		3.9 <b>K</b> 470	5% 5%	1/10W 1/10W	R2507 R2551	1-216-105-91 1-216-091-00	RES,CHIP	220K 56K	5% 5%	1/10W 1/10W
R2327	1-216-059-00		2.7K	5%	1/10W	R2552 R2553	1-216-085-00 1-216-083-00		33K 27K	5% 5%	1/10W 1/10W
R2328 R2329	1-216-049-91 1-216-059-00	RES,CHIP	1 <b>K</b> 2.7 <b>K</b>	5% . 5%	1/10W 1/10W	R2555	1-216-055-00		1.8 <b>K</b>	5%	1/10W
R2330 R2331	1-216-049-91 1-216-059-00		1K 2.7K	5% 5%	1/10W 1/10W	R2556 R2557	1-216-051-00 1-216-067-00		1.2K 5.6K	5% 5%	1/10W 1/10W
R2332	1-216-049-91	RES,CHIP	1K	5%	1/10W	R2558 R2559	1-216-057-00 1-216-039-00		2.2 <b>K</b> 390	5% 5%	1/10W 1/10W
R2333 R2334	1-216-089-91 1-216-041-00	RES,CHIP RES,CHIP	47K 470	5% 5%	1/10W 1/10W	R2560	1-216-069-00	RES.CHIP	6.8K	5%	1/10W
R2335 R2336	1-216-061-00 1-216-065-91	RES,CHIP	3.3K 4.7K	5% 5%	1/10W 1/10W	R2561 R2562	1-216-001-00 1-216-001-00		10 10	5% 5%	1/10W 1/10W
R2337	1-216-037-00	,	330	5%	1/10W	R2563 R3301	1-216-057-00 1-216-073-00	RES,CHIP	2.2K 10K	5% 5%	1/10W 1/10W
R2338 R2339	1-216-073-00 1-216-037-00	RES,CHIP	10K 330	5% 5%	1/10W 1/10W	R3302	1-216-065-91	,	4.7K	5%	1/10W
R2341 R2342	1-216-037-00	RES,CHIP	330 8.2K	5%	1/10W 1/10W	R3303 R3304	1-216-065-91 1-216-065-91	RES,CHIP	4.7K 4.7K	5% 5%	1/10W 1/10W
	1-216-071-00			5% 5%		R3308	1-216-097-91	RES,CHIP	100K	5%	1/10W
R2343 R2344	1-216-081-00 1-216-121-91	RES,CHIP	22K 1M	5% 5%	1/10W 1/10W	R3310	1-216-049-91		1K	5%	1/10W
R2345 R2346	1-216-061-00		18K 3.3K	0.50% 5%	1/10W 1/10W	R3311 R3312	1-216-689-11 1-216-095-00	RES,CHIP	39K 82K	5% 5%	1/10W 1/10W
R2347	1-216-061-00		3.3K	5%	1/10W	R3317 R3320	1-216-085-00		10K 33K	0.50% 5%	1/10W 1/10W
R2348 R2349		METAL CHIP	3.3K 15K	5% 0.50%	1/10W 1/10W	R3323	1-216-089-91		47K	5%	1/10W
R2350 R2351	1-216-061-00 1-216-061-00		3.3K 3.3K	5% 5%	1/10W 1/10W	R3333 R3334	1-216-113-00 1-216-073-00		470K 10K	5% 5%	1/10W 1/10W
						1					



Les composants identifies par une trame et une marque \( \frac{\Lambda}{2} \) sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and mark  $\triangle$  are critical for safety. Replace only with part number specified.

	<del></del>					3030		,	and the second of the second		nd Principle of the season of the
REF. NO.	PART NO.	DESCRIPTION		R	EMARK	REF. NO.	PART NO.	DESCRIPTION		Ī	REMARK
R3335 R3336 R3337	1-216-113-00 1-216-045-00 1-216-099-00	RES,CHIP	470 <b>K</b> 680 120 <b>K</b>	5% 5% 5%	1/10W 1/10W 1/10W	TH500	1-807-970-11	<pre><thermistor< pre=""></thermistor<></pre>	>		
R3338 R3339 R3346 R3347 R3348	1-216-103-00 1-216-045-00 1-216-025-91 1-216-025-91 1-216-025-91	RES,CHIP RES,CHIP RES,CHIP	180K 680 100 100	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	X101 X300	1-577-259-11	<crystal> VIBRATOR, CEI VIBRATOR, CR</crystal>	YSTAL		
R3349 R3350 R3351 R3353 R3355	1-216-025-91 1-216-109-00 1-216-115-00 1-216-111-91 1-216-089-91	RES,CHIP RES,CHIP RES,CHIP	100 330K 560K 390K 47K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W		*****	**********	*****	****	*****
R3356 R3357 R3358 R3359 R3360	1-216-051-00 1-216-051-00 1-216-051-00 1-216-081-00 1-216-073-00	RES,CHIP RES,CHIP RES,CHIP	1.2K 1.2K 1.2K 22K 10K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W		*A-1304-141-A				
R3361 R3362 R3363 R3364 R3365	1-216-089-91 1-216-049-91 1-216-049-91 1-216-073-00 1-216-099-00	RES,CHIP RES,CHIP RES,CHIP	47K 1K 1K 10K 120K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	C1200 C1201 C1202 C1203 C1204	1-164-161-11 1-163-103-00	<capacitor> ELECT CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP</capacitor>	0.0022MF 27PF	20% 10% 10% 5% 5%	10V 50V 50V 50V 50V
R3366 R3367 R3368 R3369 R3376	1-216-093-00 1-216-093-00 1-216-081-00 1-216-089-91 1-216-081-00	RES,CHIP RES,CHIP RES,CHIP	68K 68K 22K 47K 22K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	C1205 C1208 C1210 C1211 C1213	1-164-346-11 1-164-346-11 1-104-665-11	CERAMIC CHIP CERAMIC CHIP ELECT CERAMIC CHIP	1MF 1MF 100MF	20%	16V 16V 16V 16V 50V
R3378 R3380 R3390 R3394 R3395	1-216-119-00 1-216-121-91 1-216-057-00 1-216-089-91 1-216-049-91	RES,CHIP RES,CHIP RES,CHIP	820K 1M 2.2K 47K 1K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	C1214 C1215 C1216 C1219 C1220	1-126-301-11 1-126-301-11 1-126-301-11 1-163-123-00	ELECT ELECT	1MF 1MF 1MF 180PF	20% 20% 20% 5% 5%	50V 50V 50V 50V 50V
R3396 R3398 R3399 R3400 R3401	1-216-041-00 1-216-688-11 1-216-025-91 1-216-091-00 1-216-061-00	METAL CHIP RES,CHIP RES,CHIP	470 36K 100 56K 3.3K	5% 0.50% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	CN1201	* 1-766-746-11	<connector> CONNECTOR, B</connector>	OARD TO		
R3402 R3403 R3404 R3405 R3406	1-216-699-11 1-216-025-91 1-216-073-00 1-216-067-00 1-216-073-00	RES,CHIP RES,CHIP	100K 100 10K 5.6K 10K	0.50% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	IC1201	* 8-759-498-23	PLUG, CONNEC <ic> IC uPD78P018FY</ic>	CW-S02		
R3407 R4401 R4404 R4405 R4407	1-216-073-00 1-216-085-00 1-216-073-00 1-216-069-00 1-216-061-00	RES,CHIP RES,CHIP RES,CHIP	10K 33K 10K 6.8K 3.3K	5% 5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W 1/10W	IC1202 IC1203 IC1204 IC1205	8-759-149-05 8-759-335-70	IC AT24C02-10P IC uPD71051GB- IC ADM232LAR IC S-80743AL-A	·10-3B4 -REEL		
R4408	1-216-059-00	•	2.7K	5%	1/10W			<chip conduc<="" td=""><td>TOR&gt;</td><td></td><td></td></chip>	TOR>		
R4409 R4410 R4411 R4412	1-216-059-00 1-216-059-00 1-216-113-00 1-216-113-00	RES,CHIP RES,CHIP RES,CHIP	2.7K 2.7K 470K 470K	5% 5% 5% 5%	1/10W 1/10W 1/10W 1/10W	JR1 JR2 JR3 JR4 JR5	1-216-295-91 1-216-295-91 1-216-295-91 1-216-295-91 1-216-295-91	SHORT SHORT SHORT	0 0 0 0		
R4413 R4414 R4415 R4416	1-216-295-91 1-216-295-91 1-216-295-91 1-216-295-91	SHORT SHORT	0 0 0		2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	JR6 JR7 JR8	1-216-295-91 1-216-295-91 1-216-295-91	SHORT	0 0 0		
		<variable re<="" td=""><td>SISTOR&gt;</td><td></td><td></td><td></td><td></td><td><resistor></resistor></td><td></td><td></td><td></td></variable>	SISTOR>					<resistor></resistor>			
RV501	1-223-102-00	RES, ADJ, WIRE		20	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	R1201 R1202 R1203 R1204	1-216-073-00 1-216-295-91 1-216-065-91 1-216-065-91	SHORT RES,CHIP	10K 0 4.7K 4.7K	5% 5% 5%	1/10W 1/10W 1/10W
T500	1-426-668-11	TRANSFORMER		(TOH)	1	R1205	1-216-065-91		4.7K	5%	1/10W
T501 Z T502	1-453-234-11 1-413-059-00	TRANSFORMER TRANSFORMER TRANSFORMER	LASSY, FL R, FERRITE	YBACK		R1206 R1207 R1210 R1211	1-216-295-91 1-216-295-91 1-216-025-91 1-216-025-91	SHORT RES,CHIP	0 0 100 100	5% 5%	1/10W 1/10W

The components identified by shading and mark \( \triangle \) are critical for safety.

Replace only with part number specified.

Les composants identifies par une trame et une marque \( \Lambda \) sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.



REF. NO.   PART NO.   DESCRIPTION   REMARK   R	-									
1.216.295-9  SINORT   0	REF. NO.	PART NO.	DESCRIPTION	•		REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
1215   1-216-29-5   SIRORT   0	R1213	1-216-025-91	RES,CHIP	100	5%	1/10W	CN609	1-508-786-00	PIN, CONNECTOR	R (5mm PITCH) 2P
CRYSTAL>   CRYSTAL   CRYSTAL   D669	R1215 R1218 R1220	1-216-295-91 1-216-089-91 1-216-025-91	SHORT RES,CHIP RES,CHIP	0 47K 100	5%	1/10W	D605 Z	4-382-854-11 18-719-971-66	DIODE D4SB60L SCREW (M3X10), DIODE RGP15J-60	)40G23
*A-1316-349-A G BOARD, COMPLETE  *A-1316-349-A G BOARD, COMPLETE  1.533-223-11 HOLDER, FUSE  7.322-065-19 RUBBER, SILICON RTV (KE490W)  **CAPACITIOR>  **CAPACITIOR>  **CAPACITIOR>  **CAPACITIOR>  **CAPACITIOR>  **COGO			<crystal></crystal>				D607 /	N 8-719-936-85	DIODE RGP10GPI	€G23
*A.1316-349-A GBOARD, COMPLETE  *A.1316-349-A GBOARD, COMPLETE  1-533-223-11 HOLDER, FUSE  7-322-065-19 RUBBER, SILLON RTV (KB490W)  CAPACITIOR>  **CAPACITIOR>  CAPACITIOR>  CAPACITIOR>  CAPACITIOR>  CAPACITIOR>  CAPACITIOR  CAPACITIO	X1201	1-577-619-11	VIBRATOR, CR	YSTAL				8-719-029-04	DIODE D5L60	
**A.1316-349-A. G BOARD. COMPLETE  1-533-223-11 HOLDER, FISS 7-322-465-19 RUBBER, SILCON RTV (KE490W)	******	******	******	******	******	*****	D612	8-719-312-08	DIODE FMB-G16L	· · · · · · · · · · · · · · · · · · ·
Color		* A-1316-349-A	G BOARD, CO!	MPLETE ******				8-719-045-48 4-382-854-11	DIODE FML-G12S SCREW (M3X10),	3
C602		1-533-223-11 7-322-065-19	RUBBER, SILIC	ON RTV (I	Œ490W	")	D617 D618	8-719-110-46 \$8-719-971-66	DIODE RD16ESB3	3 )40G23
Column		A 1 11/2/2005		0.22ME	20 <i>0</i> z	2501/				
C606	C603 .	<u> </u>	FILM CERAMIC	0.22MF 0.0047MF	20% 20%	250V 250V	D621	8-719-911-19	DIODE 1SS119-25	
## 14394-91 CERAMIC	C605 (	1.113-924-91	CERAMIC	0.0047MF	20%	250V	• • • •		<ferrite bead<="" td=""><td>&gt;</td></ferrite>	>
C611	C607 . C608 C609	<u>M</u> 1-113-924-91 *4-374-846-11 <u>M</u> 1-113-924-91 <u>M</u> 1-113-924-91	CERAMIC COVER, CAPAC CERAMIC CERAMIC	0.0047MF ITOR, CAI 0.0047MF 0.0047MF	20% P TYPE 20% 20%	250V ; C607 250V 250V	FB604 FB605 FB608	1-410-396-41 1-410-396-41 <u>1</u> -410-397-31	FERRITE C FERRITE C	).45UH ).45UH I.1UH
C615	C611 C612 C613	<u> </u>	CERAMIC FILM FILM	0.0047MF 0.47MF 0.47MF	20% 10% 10%	250V 630V 630V	FB611 FB612	▲1-410-397-31 ▲1-410-397-31	FERRITE I	LIUH LIUH
C617	C615	A 1-136-619-11	FILM	0.0016MF	3%	2KV			<ic></ic>	
C626	C617 C618 C619 C621	<u> </u>	CERAMIC ELECT ELECT ELECT(BLOCK)	0.0033ME 10MF 220MF 1000MF	10% 20% 20%	1KV 50V 50V 160V 500V	IC602	4-058-250-01 4-382-854-11 8-749-010-47 4-382-854-11 8-759-701-56	SHEET, INSULAT SCREW (M3X10), IC STR-S3115 SCREW (M3X10), IC NJM78M05FA	P, SW (+); IC601 P, SW (+); IC602
C630 1-126-964-11 ELECT 10MF 20% 50V C632 1-107-492-11 ELECT 47MF 20% 160V C633 1-107-885-11 ELECT 3300MF 20% 16V C635	C626 C627	1-102-038-00 1-107-900-51	CERAMIC ELECT	0.001MF 4700MF 0.001MF	20%	500V 35V 500V		4-382-854-11		P, SW (+) ; IC603
C631 1-136-833-11 FILM 0.56MF 5% 200V C632 1-107-492-11 ELECT 47MF 20% 160V C633 1-107-885-11 ELECT 3300MF 20% 16V C635 \[ \Delta 1-162-115-91 \] CERAMIC 330PF 10% 2KV PHOTO COUPLER>  C636 1-107-909-11 ELECT 47MF 20% 50V C639 1-107-906-11 ELECT 10MF 20% 50V C640 1-107-906-11 ELECT 10MF 20% 50V C641 1-102-074-00 CERAMIC 0.001MF 10% 50V C641 1-102-038-00 CERAMIC 0.001MF 50V C640 1-107-906-11 PIN, CONNECTOR (POWER) CN602 * 1-695-561-11 PIN, CONNECTOR (PC BOARD) 7P CN603 * 1-580-843-11 PIN, CONNECTOR (PC BOARD) 6P CN605 * 1-573-964-11 PIN, CONNECTOR (PC BOARD) 6P										
C635	C631 C632	1-136-853-11 1-107-492-11	FILM ELECT	0.56MF 47MF	5% 20%	200V 160V				
C638	C635	<b>∆</b> 1-162-115-91	CERAMIC			2KV		uusuun aannoon oo noon oo dhaalaa ahaa ahaa ahaa ahaa ahaa ahaa a		uutunninen minimin minimin kirkkaanannossa saasaan osaasaanan osaasaanan osaasaanan osaasaanan osaasaanan osaa
C641 1-102-074-00 CERAMIC 0.001MF 10% 50V  C2601 1-102-038-00 CERAMIC 0.001MF 500V  CONNECTOR>  CN601 * 1-580-843-11 PIN, CONNECTOR (PC BOARD) 7P CN602 * 1-695-561-11 PIN, CONNECTOR (PC BOARD) 7P CN603 * 1-573-964-11 PIN, CONNECTOR (PC BOARD) 6P  CN605 * 1-573-964-11 PIN, CONNECTOR (PC BOARD) 6P  CN606 * 1-573-964-11 PIN, CONNECTOR (PC BOARD) 6P	C638 C639	<u>1-113-977-51</u> 1-107-906-11	FILM ELECT	0.47MF 10MF	10% 20%	630 <b>V</b> 50 <b>V</b>	PH601	<u> </u>	estation de la participa de la	R PC111YS
C2601 1-102-038-00 CERAMIC 0.001MF 500V Q602							0601	0 720 140 06		D774-34
CONNECTOR>         Q604 Q605         8-729-029-66 8-729-200-17         TRANSISTOR DTC114ESA Q605           CN601         * 1-580-843-11         PIN, CONNECTOR (POWER)         Q606         8-729-200-17         TRANSISTOR DTC114ESA           CN602         * 1-695-561-11         PIN, CONNECTOR (PC BOARD) 7P         Q606         8-729-029-66         TRANSISTOR DTC114ESA           CN603         * 1-508-765-00         PIN, CONNECTOR (5mm PITCH) 3P         Q607         8-729-029-66         TRANSISTOR DTC114ESA           CN605         * 1-573-964-11         PIN, CONNECTOR (PC BOARD) 6P         8-729-029-66         TRANSISTOR DTC114ESA	C2601	1-102-038-00	CERAMIC	0.001MF		500V	Q602	<b>∆</b> 8-729-023-28 8-729-303-61	TRANSISTOR 2S	D1640Q C3851-G
CN601 * 1-580-843-11 PIN, CONNECTOR (POWER) CN602 * 1-695-561-11 PIN, CONNECTOR (PC BOARD) 7P CN603 * 1-508-765-00 PIN, CONNECTOR (5mm PITCH) 3P CN605 * 1-573-964-11 PIN, CONNECTOR (PC BOARD) 6P  CN605 * 1-573-964-11 PIN, CONNECTOR (PC BOARD) 6P			<connector:< td=""><td>&gt;</td><td></td><td></td><td></td><td>8-729-029-66</td><td>TRANSISTOR DT</td><td>C114ESA</td></connector:<>	>				8-729-029-66	TRANSISTOR DT	C114ESA
	CN602 CN603 CN605	* 1-695-561-11 * 1-508-765-00 * 1-573-964-11	PIN, CONNECT PIN, CONNECT PIN, CONNECT	OR (PC BC OR (5mm l OR (PC BC	OARD) ( PITCH)	3P	Q606	8-729-029-66	TRANSISTOR DT	C114ESA

CN607 \*1-564-509-11 PLUG, CONNECTOR 6P



Les composants identifies par une trame et une marque \(\Delta\) sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and mark  $\triangle$  are critical for safety. Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION		;	REMARK	REF. NO.	PART NO.	DESCRIPTION	·	on the street on the street of the street	REMARK
		<resistor></resistor>			in this in more secure spaces and the		* A-1316-350-A	A GA BOARD, C	OMPLETE	;	
R602		METAL OXIDE METAL OXIDE CARBON	1M 56K 39K 1.2K 1.2K	20% 5% 5% 5% 5%	1/2W 3W F 3W F 1/4W 1/4W			HOLDER, FUSE SCREW (M3X10		·)	
		WIREWOUND	0.15	10%	3W F			<capacitor></capacitor>			
R608 A R609 A	∆1-247-849-91 ∆1-247-857-91 ∆1-247-857-91 ∆1-247-853-91	CARBON CARBON	5.6K 12K 12K 8.2K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W	C1601 C1602	1-107-910-11 1-107-911-11		100MF 220MF	20% 20%	50V 50V
Sheet a manufacture and a second and a second	1-249-417-91	CARBON	ıĸ	5%	1/4W F			<connector:< td=""><td>&gt;</td><td></td><td></td></connector:<>	>		
	1-249-404-00 1-247-835-91 د	CARBON	82 1.5K	5% 5%	1/4W 1/4W	CN1601	* 1-564-509-11	PLUG, CONNEC	CTOR 6P		
	\1-249-385-91 \1-202-727-91		2.2 4.7M	5% 10%	1/4W F 1/2W			<ic></ic>			
R616 <u>/</u> 1 R617	1-247-863-91 1-202-933 <b>-</b> 61		22 <b>K</b> 0.1	5% 10%	1/4W 1/2W F	IC1601	8-759-390-50	IC uPC2408AHF	,		
R619 R620	1-202-933-61 1-202-933-61	FUSIBLE	0.1 0.1	10% 10%	1/2W F 1/2W F			<resistor></resistor>			
R621	1-215-877-11	METAL OXIDE	22K	5%	1W F	R1604	1-247-895-91		470K	5%	1/4W
R622 R623	1-249-401-11 1-249-417-11	CARBON	47 1K	5% 5%	1/4W F 1/4W						
R624 R625 R627 A		METAL OXIDE		5% 5%	1/4W 3W F 3W F	******	******	******	*****	*****	*****
and the second s		METAL OXIDE		5% 5%	3W F		* A-1331-763-A	C BOARD, CO	MPLETE (2	Oinch m	nodel)
R629 ₫ R630 ₫ R631	1-202-727-91 1-216-490-71 1-249-415-11	SOLID METAL OXIDE CARBON	4.7M 39K 680	10% 5% 5%	1/2W 3W F 1/4W F		7-682-949-01	SCREW +PSW 3			
R632 R633	1-249-401-11 1-249-429-11		47 10K	5% 5%	1/4W F			<capacitor></capacitor>			
R634 R635	1-247-883-00 1-249-429-11	CARBON	150K 150K 10K	5% 5%	1/4W 1/4W 1/4W	C701 C702	1-102-116-00 1-102-116-00		680PF 680PF	10% 10%	50V 50V
R636 R637	1-247-895-91 1-249-424-11	CARBON	470K 3.9K	5% 5%	1/4W 1/4W	C703 C704	1-102-116-00 1-102-116-00 1-102-121-00	CERAMIC	680PF 0.0022MF	10%	50V 50V 50V
R638	1-249-417-11		1K	5%	1/4W	C705	1-126-933-11		100MF	20%	16V
R639 R640	1-249-419-11 1-247-893-11	CARBON	1.5K 390K	5% 5%	1/4W 1/4W	C706 C707	1-102-074-00 1-162-116-00	CERAMIC	0.001MF 680PF	10% 10%	50V 2KV
R641 R642	1-215-423-00 1-216-391-11	METAL OXIDE	1.2K 1.5	1% 5%	1/4W 3W F		1-136-601-11 1-101-880-00	CERAMIC	0.01MF 47PF	10% 5%	630V 50V
	1-202-878-91 1-202-878-91		220K 220K	20% 20%	1/2W 1/2W	C711 C712	1-101-880-00 1-101-880-00		47PF 47PF	5% 5%	50V 50V
			,··-			C714 C715	1-102-976-00 1-102-976-00	CERAMIC	180PF 180PF	5% 5%	50V 50V
		<relay></relay>				C716 C724	1-102-976-00 1-128-582-11	CERAMIC	180PF 10MF	5% 20%	50V 100V
RY601 ∆	1-515-738-11	RELAY				C726	1-107-662-11		22MF	20%	250V
		<transforme< td=""><td>R&gt;</td><td></td><td></td><td>C733 C734</td><td>1-107-652-11 1-101-888-00</td><td>CERAMIC</td><td>10MF 68PF</td><td>20% 5%</td><td>250V 50V</td></transforme<>	R>			C733 C734	1-107-652-11 1-101-888-00	CERAMIC	10MF 68PF	20% 5%	250V 50V
		TRANSFORMER TRANSFORMER				C737	1-102-934-00	CERAMIC	1PF	0.25PF	30 <b>V</b>
		TRANSFORMER						<connector></connector>	•		
THP601 <b>∆</b>	1-808-059-32	<thermistor></thermistor>					* 1-573-964-11	PLUG, CONNECTO PIN, CONNECTO TAB (CONTACT	OR (PC BO	ARD) 6F	
								<diode></diode>			
VIDDON A	1 000 012 01	<varistor></varistor>				D701		DIODE 188119-2			
	1-809-942-81 1-809-942-81					D702 D703 D704	8-719-911-19	DIODE 1SS119-2 DIODE 1SS119-2 DIODE 1SS119-2	5		
					 	D704 D705		DIODE 188119-2			
******	*******	*******	******	******	*******	D706 D707	8-719-901-83	DIODE 1SS119-2 DIODE 1SS83	5		
					Í	D708 D709	8-719-901-83 8-719-901-83	DIODE 1SS83 DIODE 1SS83			
					ŀ						

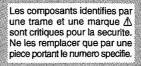
The components identified by shading and mark \( \triangle \) are critical for safety.

Replace only with part number specified.

Les composants identifies par une trame et une marque \( \frac{\Lambda}{\text{sont}} \) critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.



	REF. NO.	PART NO.	DESCRIPTION		R	EMARK		REF. NO.	PART NO.	DESCRIPTION		]	REMARK	<u>.</u>
	D713	8-719-901-83	DIODE 1SS83					R738	1-247-807-31 1-247-807-31		100 100	5% 5%	1/4W 1/4W	
	D715 D716 D717	8-719-901-83	DIODE 1SS83 DIODE 1SS83 DIODE 1SS83					R739 R740 R741 R742	1-247-807-31 1-249-433-11 1-249-433-11 1-249-433-11	CARBON CARBON	22K 22K 22K 22K	5% 5% 5%	1/4W 1/4W 1/4W 1/4W	F
			<jack></jack>					R744 R745	1-247-843-11 1-249-429-11		3.3K 10K	5% 5%	1/4W 1/4W	
34000	1701 <i>I</i>	1-540-124-11	SOCKET, PICTU	RE TUBE				R746 R747 R748		METAL OXIDE CARBON	47K 10K 1K	5% 5% 5%	1W 1/4W 1/4W	F F
			<coil></coil>					R749		METAL OXIDE		5%	2W	F
	L702 L703 L704	1-408-608-31 1-408-608-31	INDUCTOR 22U INDUCTOR 27U INDUCTOR 27U	H H				R751 R752 R753 R754	1-247-887-00 1-247-887-00 1-247-887-00 1-247-863-91	CARBON CARBON	220K 220K 220K 22K	5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W	
	L705 L706		INDUCTOR 27U INDUCTOR 22U	H				R755 R756 R760	1-249-434-11 1-249-440-11 1-249-400-11	CARBON	27K 82K 39	5% 5% 5%	1/4W 1/4W 1/4W	F
	0701	0.720.110.79	<transistor> TRANSISTOR 25</transistor>	•	TC:		,			<variable re<="" td=""><td>SISTOP -</td><td></td><td></td><td></td></variable>	SISTOP -			
	Q701 Q702 Q703 Q704 Q705	8-729-119-78 8-729-119-78 8-729-200-17	TRANSISTOR 25 TRANSISTOR 25 TRANSISTOR 25 TRANSISTOR 25	SC2785-HF SC2785-HF SA1091-O	E			RV708 Z RV709		RES, ADJ, META	AL FILM 11			
	Q706		TRANSISTOR 25		•			ن جلو جلاء وله وله وله وله	# # # # # # # # # # # # # # # # # # #	*****	*****	***	****	**
	Q707 Q708 Q709 Q710	8-729-326-11 8-729-326-11	TRANSISTOR 25 TRANSISTOR 25 TRANSISTOR 25	SC2611 SC2611						C BOARD, COI	MPLETE (1			
	Q711 Q712 Q713	8-729-200-17 8-729-255-12	TRANSISTOR 25 TRANSISTOR 25 TRANSISTOR 25 TRANSISTOR 25	SA1091-O SC2551-O			1			COVER (REAR I SCREW +PSW 3		OL		
	Q714 Q715		TRANSISTOR 25 TRANSISTOR 25				1			<capacitor></capacitor>				
	Q716 Q717		TRANSISTOR 25					C701 C702 C703 C704	1-102-157-00 1-102-157-00 1-102-157-00 1-102-121-00	CERAMIC CERAMIC CERAMIC	560PF 560PF 560PF 0.0022MF		500V 500V 500V 50V	
			<resistor></resistor>	10077	F. 64	1 / 4337		C705	1-126-933-11		100MF 0.001MF	20%	16V 50V	
	R702 R704 R705 R706 R707	1-249-441-11 1-215-404-00 1-215-404-00 1-215-404-00 1-249-429-11	METAL METAL METAL	100K 200 200 200 10K	5% 1% 1% 1% 5%	1/4W 1/4W 1/4W 1/4W 1/4W		C706 C707 C708 C710 C711	1-102-074-00 1-162-116-00 1-136-601-11 1-101-880-00 1-101-880-00	CERAMIC FILM CERAMIC	680PF 0.01MF 47PF 47PF	10% 10% 5% 5% 5%	2KV 630V 50V 50V	
	R708	1-249-429-11		10K	5%	1/4W		C712	1-101-880-00 1-107-651-11	CERAMIC	47PF 4.7MF	5% 20%	50V 250V	
	R709 R710 R711 R712	1-249-429-11 1-215-388-00 1-215-390-00 1-215-388-00	METAL METAL	10K 43 51 43	5% 1% 1% 1%	1/4W 1/4W 1/4W 1/4W		C713 C714 C715 C716	1-107-631-11 1-102-976-00 1-102-976-00 1-102-976-00	CERAMIC CERAMIC	180PF 180PF 180PF	5% 5% 5%	50V 50V 50V 50V	
	R715 R716 R717 R718 R719	1-202-818-00	METAL OXIDE SOLID METAL OXIDE	1K	20% 5% 20% 5% 20%	1/2W 3W 1/2W 3W 1/2W	F F	C717 C718 C720 C734 C735	1-107-372-11 1-107-372-11 1-106-383-00 1-102-973-00 1-102-816-00	MYLAR MYLAR CERAMIC	0.22MF 0.22MF 0.047MF 100PF 120PF	10% 10% 10% 5% 5%	200V 200V 200V 50V 50V	
	R720		METAL OXIDE		5%	3W	F	C736	1-102-816-00	CERAMIC	120PF	5%	50V	
	R722 R723 R724 R725	1-202-883-11 1-202-838-00 1-202-842-11 1-202-838-00	SOLID SOLID	680K 100K 220K 100K	20% 20% 20% 20%	1/2W 1/2W 1/2W 1/2W				<connector></connector>				
	R726 R728 R729	1-202-846-00 1-202-837-00 1-202-549-00	SOLID SOLID	470K 82K 100	20% 20% 20%	1/2W 1/2W 1/2W	\$ 2 2 2 3 3 4 8 8		* 1-573-964-11	PLUG, CONNECTO PIN, CONNECTO TAB (CONTACT	OR (PC BO.	ARD) 6	P	
	R731 R732	1-247-815-91 1-247-815-91		220 220	5% 5%	1/4W 1/4W				<diode></diode>				
	R733 R734 R735 R736 R737	1-247-815-91 1-249-409-11 1-249-409-11 1-249-409-11 1-247-807-31	CARBON CARBON CARBON	220 220 220 220 220 100	5% 5% 5% 5% 5%	1/4W 1/4W 1/4W 1/4W 1/4W	F F F	D701 D702 D703 D704 D705	8-719-911-19 8-719-911-19 8-719-911-19	DIODE 1SS119-2 DIODE 1SS119-2 DIODE 1SS119-2 DIODE 1SS119-2 DIODE 1SS119-2	15 15 15			
							i		•					



The components identified by shading and mark  $\triangle$  are critical for safety.
Replace only with part number specified.

C	Н				sont critiques po Ne les remplace piece portant le ni	r que par une	cal for safe Replace or specified.	ety. nly with pa					
REF. NO.	PART NO.	DESCRIPTION		. I	REMARK	١.	REF. NO.	PART NO.	DESCRIPTION		J	REMARK	
D706		DIODE 1SS119-2	25	-		-	R740	1-249-429-11	CARBON	10K	5%	1/4W	F
D707 D708	8-719-901-83	DIODE 1SS83 DIODE 1SS83				,	R741	1-249-429-11		10K	5%	1/4W	
D709 D713	8-719-901-83 8-719-901-83	DIODE 1SS83 DIODE 1SS83					R742 R744	1-249-429-11 1-249-429-11	CARBON	10K 10K	5% 5%	1/4W 1/4W	F
D715		DIODE 18883					R745 R746	1-249-429-11 1-215-879-11	METAL OXIDE	10K 47K	5% 5%	1/4W 1W	F
D716 D717		DIODE 1SS83 DIODE 1SS83					R747	1-247-725-11		10 <b>K</b>	5%		F
		I A CIV.					R748 R749		METAL OXIDE		5% 5%	1/4W 2W	F
1701	× 1 502 010 11	<pre><jack> SOCKET PICTL</jack></pre>	DE THIE				R750 R751	1-249-400-11 1-247-887-00		39 220K	5% 5%	1/4W 1/4W	F,
: 1101 - 2	∆ 1-320-81 <del>3-</del> 11	SOCKEI, FICIC	NE IUDE				R752 R753	1-247-887-00 1-247-887-00		220K 220K	5% 5%	1/4W 1/4W	
		<coil></coil>					K755	1-247-007-00	CARBON	220K	370	1/4**	
L701 L705		INDUCTOR 22U INDUCTOR 39U							<variable re<="" td=""><td>ESISTOR&gt;</td><td></td><td></td><td></td></variable>	ESISTOR>			
2.00							RV707 RV708		RES, ADJ, META				
		<transistor></transistor>	. '				RV709	* 4-374-912-01	COVER (MAIN) RES, ADJ, META	, CV VOL ;	; RV708	000000000000000000000000000000000000000	ersonase.
Q701 Q702		TRANSISTOR 25							, ,				
Q703 Q704	8-729-200-17	TRANSISTOR 25	SA1091-O	Œ			******	*****	*****	******	*****	******	**
Q705		TRANSISTOR 25						* A-1372-410-A	H BOARD, CO	MPLETE			
Q706 Q707	8-729-326-11	TRANSISTOR 25	SC2611					* 4 240 200 00	*********	*****			
Q708 Q709	8-729-326-11	TRANSISTOR 25 TRANSISTOR 25 TRANSISTOR 25	SC2611					* 4-348-208-00	HOLDER, LED				
Q710 Q711		TRANSISTOR 25							<connector></connector>	•			
Q712 Q713	8-729-200-17	TRANSISTOR 25 TRANSISTOR 25	SA1091-O						PLUG, CONNEC				
Q714 Q715	8-729-255-12	TRANSISTOR 25	SC2551-O	Æ.			0,1,00	1 00 1 020 11	1200,000,000				
Q716		TRANSISTOR 25							<diode></diode>				
Q717	8-729-119-78	TRANSISTOR 25	SC2785-HF	Œ			D2102 D2103		DIODE SLP281C DIODE TLY123	C-50			
		<resistor></resistor>					D2104	8-719-991-33	DIODE 1SS133T	'-77			
R702	1-247-897-11		560K	5%	1/4W				<resistor></resistor>				
R704 R705	1-215-405-00 1-215-405-00	METAL	220 220	1% 1%	1/4W 1/4W		R2101	1-249-419-11		1.5K	5%	1/4W	
R706 R707	1-215-405-00 1-249-431-11		220 15K	1% 5%	1/4W 1/4W		R2107 R2137 R2138	1-249-430-11 1-249-414-11 1-249-414-11	CARBON	12K 560 560	5% 5% 5%	1/4W 1/4W 1/4W	
R708 R709	1-249-431-11 1-249-431-11		15K 15K	5% 5%	1/4W 1/4W		R2140	1-249-414-11		560	5%	1/4W	
R710 R711	1-215-391-00 1-215-394-00	METAL	56 75	1% 1%	1/4W 1/4W		R2141 R2142	1-249-414-11 1-249-414-11		560 560	5% 5%	1/4W 1/4W	
R712	1-215-392-00		62	1%	1/4W		R2143 R2144	1-249-414-11 1-249-414-11	CARBON	560 560	5% 5%	1/4W 1/4W	
R715 R716	1-202-818-00 1-216-486-00	SOLID METAL OXIDE	1K 8.2K	20% 5%	1/2W 3W	F	R2145	1-249-414-11		560	5%	1/4W	
R717 R718	1-202-818-00 1-216-486-00	SOLID METAL OXIDE	1K 8.2K	20% 5%	1/2W 3W	F		1-215-419-00 1-215-414-00		820 510	1% 1%	1/4W 1/4W	
R719	1-202-818-00		1K	20%	1/2W		R2150 R2151	1-215-409-00 1-215-407-00	METAL	330 270	1% 1%	1/4W 1/4W	
R720 R722	1-202-883-11		680K	5% 20%	3W 1/2W	F	R2152	1-215-404-00		200	1%	1/4W	
R723 R724	1-202-838-00 1-202-842-11	SOLID	100K 220K	20% 20%	1/2W 1/2W		R2153 R2154	1-215-401-11	METAL	150 120	1% 1%	1/4W 1/4W	
R725	1-202-719-00		1M 220	20% 5%	1/2W 1/4W		R2155 R2156 R2157	1-215-397-00 1-215-421-00 1-215-416-00	METAL	100 1K 620	1% 1% 1%	1/4W 1/4W 1/4W	
R731 R732 R733	1-247-815-91 1-247-815-91 1-247-815-91	CARBON	220 220 220	5% 5% 5%	1/4W 1/4W 1/4W		R2157 R2158	1-215-410-00		360	1%	1/4W	
R734 R735	1-249-409-11 1-249-409-11	CARBON	220 220 220	5% 5% 5%	1/4W 1/4W 1/4W			1-215-405-00 1-215-421-00	METAL	220 1K	1% 1% 1%	1/4W 1/4W	
R736	1-249-409-11		220	5%	1/4W	.	112100	1 213 -121 00		***	* 70	21:11	
R737 R738	1-247-807-31 1-247-807-31	CARBON	100 100	5% 5%	1/4W 1/4W	-			<variable re<="" td=""><td>SISTOR&gt;</td><td></td><td></td><td></td></variable>	SISTOR>			
R739	1-247-807-31		100	5%	1/4W	į	RV2101	1-225-385-11	RES, VAR, CAR	BON 20K			

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifies par une trame et une marque  $\Lambda$  sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.



REF. NO.	PART NO.	DESCRIPTION		R	EMARK	REF. NO.	PART NO.	DESCRIPTION		Ē	REMARK
RV2103		RES, VAR, CARI						<connector></connector>			
RV2105 RV2109 RV2113	1-225-385-11	RES, VAR, CARI RES, VAR, CARI RES, VAR, CARI	BON 20K			CN801	* 1-573-896-11	SOCKET, CONN	ECTOR 12	P	
RV2117	1-225-385-11	RES, VAR, CARI	BON 20K					<ic></ic>			
		<switch></switch>						<coil></coil>			
S2101	1-572-811-21	SWITCH, TACTI	L			L801	1-410-470-11	INDUCTOR 10U	Н		
S2102 S2103 S2104 S2105	1-572-811-21 1-572-811-21	SWITCH, TACTI SWITCH, TACTI SWITCH, TACTI SWITCH, TACTI	L L					<resistor></resistor>			
S2106		SWITCH, TACTI				R802 R803	1-249-435-11 1-247-863-91		33K 22K	5% 5%	1/4W 1/4W
S2107 S2108	1-771-328-11	SWITCH, TACTI SWITCH, TACTI	LE			R804 R805	1-215-454-00 1-215-461-00	METAL	24K 47K	1% 1%	1/4W 1/4W
S2108 S2109 S2110	1-572-811-21	SWITCH, TACTI SWITCH, TACTI	L			R808	1-249-417-11		1K	5%	1/4W
		•				R812 R813	1-249-417-11 1-249-417-11		1K 1K	5% 5%	1/4W 1/4W
S2111 S2113	1-771-328-11	SWITCH, TACTI	LE			R815	1-247-843-11	CARBON	3.3K 1.2K	5% 5%	1/4W 1/4W
S2114	1-//1-328-11	SWITCH, TACTI	LE		;	R816 R817	1-249-418-11 1-249-418-11		1.2K 1.2K	5%	1/4W 1/4W
******	******	*****	******	*****	******	R818 R819 R820	1-249-418-11 1-249-418-11 1-249-422-11	CARBON	1.2K 1.2K 2.7K	5% 5% 5%	1/4W 1/4W 1/4W
	* A-1388-204-A	JBOARD, CON				11020	1 2 1 7 1 2 1 1	0.11.201			
						******	*****	*****	******	*****	*****
		<connector></connector>					1-537-877-21	TERMINAL BOA	ARD ASSY	. I/O (O I	BOARD)
CN608	* 1-695-561-11	PIN, CONNECTO	OR (PC BOA	ARD) 7P			1 55, 5 22	******	******	****	-,,
		<switch></switch>					2-990-241-02 * 3-175-740-01	HOLDER (A), I TERMINAL	PLUG		
6201	A 1 C00 001 11	SWITCH, PUSH	(	ED)			* 3-175-741-01 * 3-175-742-01	NUT WASHER			
2001	<u>Д</u> 1-092-921-11	SWIFER, FUSH	(AL. FOW	LN)			3-178-213-21	SCREW +P 3X	10		
******	******	*****	*****	******	*****		7-685-135-19	SCREW +P 2.6	X10 TYPE2	SLIT	
	* A-1390-778-A	X BOARD, CO						<capacitor></capacitor>			
		*******	*****			C2401		CERAMIC CHIP		5%	50V
		<connector></connector>				C2402 C2403	1-104-396-11 1-104-396-11	ELECT	10MF 10MF	20% 20%	16V 16V
CN108	* 1-564-518-11	PLUG, CONNEC	TOR 3P			C2404 C2405	1-104-396-11 1-124-589-11		10MF 47MF	20% 20%	16V 16V
						C2406	1-104-396-11	ELECT	10MF	20%	16 <b>V</b>
		<diode></diode>				C2407 C2408	1-104-396-11 1-104-396-11	ELECT ELECT	10MF 10MF	20% 20%	16V 16V
D001 D002	8-719-301-36 8-719-301-36	DIODE SEL4410 DIODE SEL4410	E-D F-D			C2409 C2410	1-124-234-00	ELECT CERAMIC CHIP	22MF 0.022MF	20%	16V 50V
D002 D003 D004	8-719-301-36	DIODE SEL4410 DIODE SEL4410	E-D			C2411	1-104-396-11		10MF	20%	16V
D004	6-719-301-30	DIODE SELFFIO	L-D			C2412 C2413	1-104-396-11		10MF	20% 5%	16V 50V
و مله علد علد علد عله عله عله عله		:******	***	de sûr de sûr sûr sûr sûr sûr	*****	C2414 C2415	1-126-301-11		1MF	20%	50V 50V
****									47MF	20%	16V
	* A-1390-779-7	A S BOARD, CO!	MPLE1E (U	J/C mode	ONLY)	C2416 C2418		CERAMIC CHIP	0.022MF		50V
						C2422 C2423	1-124-234-00 1-124-234-00	ELECT	22MF 22MF	20% 20%	16V 16V
		<capacitor></capacitor>			<b></b>	C2424		CERAMIC CHIP		00%	50V
C805 C806	1-102-978-00 1-136-165-00	FILM	220PF 0.1MF	5% 5%	50V 50V	C2425 C2426	1-124-589-11 1-124-589-11	ELECT	47MF	20% 20%	16V 16V
C807 C810	1-130-477-00 1-136-165-00		0.0033MF 0.1MF	5% 5%	50V 50V	C2427 C2428		CERAMIC CHIP		20%	16V 50V
C811	1-136-165-00		0.1MF	5%	50V	C2429	1-124-234-00		22MF	20%	16V
C812 C813	1-136-495-11 1-124-261-00		0.068MF 10MF	5% 20%	50V 50V	C2430 C2431	1-163-033-91 1-124-234-00	CERAMIC CHIP ELECT	0.022MF 22MF	20%	50V 16V
C818	1-136-165-00		0.1MF	5%	50V	C2432	1-124-234-00		22MF	20%	16V



Les composants identifies par une trame et une marque  $\triangle$  sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and mark ∆ are critical for safety.
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C2433 C2434	1-163-033-91 1-124-463-00	CERAMIC CHIP	0.022MF 0.1MF	20%	50V 50V	IC2405	8-759-287-89	IC MM1113XFF	
C2435 C2436 C2437 C2438 C2439	1-163-033-91 1-124-234-00	CERAMIC CHIP ELECT CERAMIC CHIP ELECT	0.022MF 22MF	20% 20% 20% 20%	50V 16V 50V 16V 16V	J2401 J2402 J2403	1-766-738-11	<jack> CONNECTOR, COAXIAL (BNC) BNC (WITH SW) CONNECTOR, COAXIAL (BNC)</jack>	
C2440 C2441 C2442 C2443 C2444		CERAMIC CHIP ELECT ELECT ELECT		20% 20% 20% 20%	50V 16V 16V 16V 16V	J2404 J2405 J2406 J2407 J2408	1-766-738-11 1-562-261-71 1-766-738-11 1-562-261-71 1-766-738-11	BNC (WITH SW) CONNECTOR, COAXIAL (BNC) BNC (WITH SW) CONNECTOR, COAXIAL (BNC) BNC (WITH SW)	
C2445 C2446 C2447 C2448 C2449		ELECT		20% 20% 20%	50V 50V 16V 16V 16V	J2409 J2410 J2411 J2412 J2413	1-766-738-11 1-562-261-71 1-766-738-11	CONNECTOR, COAXIAL (BNC) BNC (WITH SW) CONNECTOR, COAXIAL (BNC) BNC (WITH SW) JACK, PIN (MOUNT TYPE)	
C2450 C2451 C2452 C2454 C2461	1-124-234-00 1-124-589-11 1-124-589-11 1-126-163-11	ELECT ELECT ELECT	22MF 47MF 47MF 4.7MF 0.1MF	20% 20% 20% 20%	16V 16V 16V 25V 50V	J2414 J2415 J2416 J2417 J2418	1-507-802-41 1-507-802-41 1-507-802-41 1-507-802-41 1-507-802-41	JACK, PIN (MOUNT TYPE) JACK, PIN (MOUNT TYPE)  JACK, PIN (MOUNT TYPE) JACK, PIN (MOUNT TYPE) JACK, PIN (MOUNT TYPE)	
C2462 C2463 C2464 C2465 C2466	1-165-319-11 1-165-319-11 1-165-319-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	0.1MF 0.1MF 0.1MF		50V 50V 50V 50V 50V	J2419 J2420		JACK, PIN (MOUNT TYPE) DIN SOCKET 8P <chip conductor=""></chip>	
C2467 C2468 C2469 C2470	1-165-319-11 1-165-319-11 1-165-319-11	CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP CERAMIC CHIP	0.1MF 0.1MF 0.1MF		50V 50V 50V 50V	JR1 JR4 JR5 JR7 JR12	1-216-295-91 1-216-295-91 1-216-295-91	CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP	
CN306 CN307	1-564-522-11	<connector> PLUG, CONNEC PLUG, CONNEC</connector>	TOR 11P TOR 7P			JR13 JR14 JR15 JR16 JR17	1-216-295-91 1-216-295-91 1-216-295-91	CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP	
CN2402	1-695-581-11 1-580-525-12 <u>1-251-263-11</u> 1-565-167-12	TERMINAL, (S)	SUB ARITY UNI (WITH SW)		YPE)	JR19 JR20 JR21 JR23 JR30	1-216-295-91 1-216-295-91 1-216-295-91	CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP	
CN2403 D2402		TERMINAL, S (V <diode> DIODE 1SS352</diode>	VITH SW)			JR34 JR35 JR40 JR41 JR43	1-216-295-91 1-216-295-91 1-216-295-91	CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP	
D2404 D2405 D2406 D2407	8-719-800-76 8-719-800-76 8-719-800-76 8-719-800-76	DIODE 1SS226 DIODE 1SS226 DIODE 1SS226 DIODE 1SS226				JR46 JR47 JR48 JR52	1-216-295-91 1-216-295-91 1-216-295-91 1-216-295-91	CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP CONDUCTOR, CHIP	
D2408 D2409 D2410 D2411 D2415	8-719-800-76 8-719-800-76 8-719-800-76	DIODE 1SS226 DIODE 1SS226 DIODE 1SS226 DIODE 1SS226 DIODE 1SS226				JR60 O2401		CONDUCTOR, CHIP <transistor>  TRANSISTOR 2SC1623-L5L6</transistor>	
D2416 D2417 D2418 D2420 D2421	8-719-800-76 8-719-800-76 8-719-037-53	DIODE 1SS226 DIODE 1SS226 DIODE 1SS226 DIODE RD27SB- DIODE RD27SB-				Q2401 Q2402 Q2403 Q2404 Q2405	8-729-216-22 8-729-216-22 8-729-216-22	TRANSISTOR 2SC1162-G TRANSISTOR 2SA1162-G TRANSISTOR 2SA1162-G TRANSISTOR 2SA1162-G	
D2422 D2423	8-719-037-53	DIODE RD27SB- DIODE RD27SB-	-T1			Q2408 Q2409 Q2410 Q2411 Q2412	8-729-120-28 8-729-120-28 8-729-120-28	TRANSISTOR 2SC1623-L5L6 TRANSISTOR 2SC1623-L5L6 TRANSISTOR 2SC1623-L5L6 TRANSISTOR 2SC1623-L5L6 TRANSISTOR 2SC1623-L5L6	
IC2401 IC2402 IC2403 IC2404	8-759-509-71 8-759-287-89	<ic> IC XRU4021BF-IC XRU4021BF-IC MM1113XFF IC MM1111XF</ic>			,	Q2414 Q2415 Q2416 Q2417	8-729-120-28 8-729-216-22	TRANSISTOR 2SC1623-L5L6 TRANSISTOR 2SC1623-L5L6 TRANSISTOR 2SA1162-G TRANSISTOR 2SC1623-L5L6	



REF. NO.	PART NO.	DESCRIPTION		REMARK	REF. NO.	PART NO.	DESCRIPTION		REMARK
		<resistor></resistor>			R2480	1-216-049-91	METAL GLAZE 1K	5%	1/10W
			~~	1 (1 033)	R2481	1-216-093-00	METAL GLAZE 68K	5%	1/10W
R2401 R2402		METAL GLAZE 10K METAL GLAZE 560	5% 5%	1/10W 1/10W	R2482	1-214-702-00	METAL 75	1%	1/4W
R2404	1-216-089-91	METAL GLAZE 47K	5%	1/10W	R2483		METAL GLAZE 56K	5%	1/10W
R2405 R2406		METAL GLAZE 10K METAL GLAZE 47K	5% 5%	1/10W 1/10W	R2484 R2485		METAL GLAZE 120 METAL GLAZE 3.9K	5% 5%	1/10W 1/10W
					R2486	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R2407 R2408		METAL GLAZE 10K METAL GLAZE 47K	5% 5%	1/10W 1/10W	R2487	1-216-093-00	METAL GLAZE 68K	5%	1/10W
R2409	1-216-073-00	METAL GLAZE 10K	5%	1/10W	R2488	1-214-702-00		1%	1/4W
R2410 R2411		METAL GLAZE 47K METAL GLAZE 10K	5% 5%	1/10W 1/10W	R2489 R2490		METAL GLAZE 56K METAL GLAZE 3.9K	5% 5%	1/10W 1/10W
K2411					R2491	1-216-027-00	METAL GLAZE 120	5%	1/10W
R2412 R2413		METAL GLAZE 47K METAL GLAZE 10K	5% 5%	1/10W 1/10W	R2492	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R2414	1-216-089-91	METAL GLAZE 47K	5%	1/10W	R2493		METAL GLAZE 68K	5%	1/10W
R2415 R2416		METAL GLAZE 10K METAL GLAZE 47K	5% 5%	1/10W 1/10W	R2494 R2495	1-214-702-00 1-214-702-00		1% 1%	1/4W 1/4W
K2410					R2496	1-216-091-00	METAL GLAZE 56K	5%	1/10W
R2417 R2418		METAL GLAZE 10K METAL GLAZE 47K	5% 5%	1/10W 1/10W	R2497	1-216-063-91	METAL GLAZE 3.9K	5%	1/10W
R2419		METAL GLAZE 10K	5%	1/10W	R2498		METAL GLAZE 330	5%	1/10W
R2420		METAL GLAZE 47K METAL GLAZE 10K	5% 5%	1/10W 1/10W	R2499 R3400		METAL GLAZE 1K METAL GLAZE 68K	5% 5%	1/10W 1/10W
R2421	1-210-073-00	METAL GLAZE TOK	370	1/10**	R3402		METAL GLAZE 56K	5%	1/10W
R2422		METAL GLAZE 47K	5% 5%	1/10W 1/10W	R3404	1-216-063-91	METAL GLAZE 3.9K	5%	1/10W
R2423 R2424		METAL GLAZE 10K METAL GLAZE 47K	5%	1/10W	R3405	1-216-037-00	METAL GLAZE 330	5%	1/10W
R2425		METAL GLAZE 10K	5%	1/10W 1/4W	R3406 R3408		METAL GLAZE 1K METAL GLAZE 68K	5% 5%	1/10W 1/10W
R2426	1-214-775-00	METAL 82K	1%	1/4 W	R3409	1-214-702-00	METAL 75	1%	1/4W
R2427		METAL GLAZE 100K	5% 5%	1/10W 1/10W	R3410	1-216-091-00	METAL GLAZE 56K	5%	1/10W
R2428 R2429		METAL GLAZE 220K METAL GLAZE 100	5%	1/10W 1/10W	R3411	1-216-063-91	METAL GLAZE 3.9K	5%	1/10W
R2430		METAL GLAZE 560K	5% 5%	1/10W	R3412 R3413		METAL GLAZE 330 METAL GLAZE 10K	5% 5%	1/10W 1/10W
R2431	1-210-077-00	METAL GLAZE 15K	370	1/10W	R3414		METAL GLAZE 10K	5%	1/10W
R2432	1-214-775-00		1%	1/4W	R3416	1-216-049-91	METAL GLAZE 1K	5%	1/10W
R2433 R2434		METAL GLAZE 100K METAL GLAZE 220K	5% 5%	1/10W 1/10W	R3417	1-216-093-00	METAL GLAZE 68K	5%	1/10W
R2435	1-216-025-91	METAL GLAZE 100	5%	1/10W	R3418 R3419	1-214-702-00	METAL 75 METAL GLAZE 330	1% 5%	1/4W 1/10W
R2436	1-210-115-00	METAL GLAZE 560K	5%	1/10W	R3419		METAL GLAZE 330 METAL GLAZE 82	5%	1/10W
R2437		CONDUCTOR, CHIP	5%	1/10W	R3421	1-216-689-11	METAL GLAZE 39K	5%	1/10W
R2438 R2439	1-216-077-00	METAL GLAZE 15K METAL 82K	1%	1/10 <b>W</b>	R3422		METAL GLAZE 1K	5%	1/10W
R2440	1-216-105-91	METAL GLAZE 220K	5% 5%	1/10W 1/10W	R3423 R3424		METAL GLAZE 27K METAL GLAZE 1K	5% 5%	1/10W 1/10W
R2441	1-216-097-91	METAL GLAZE 100K	3%	1/10W	R3424		METAL GLAZE 1K METAL GLAZE 3.3K	5%	1/10W
R2442		METAL GLAZE 100	5% 5%	1/10W 1/10W	R3426	1-216-099-00	METAL GLAZE 120	5%	1/10W
R2443 R2444		METAL GLAZE 560K METAL GLAZE 15K	5%	1/10W	R3427	1-216-089-91	METAL GLAZE 47K	5%	1/10W
R2446	1-214-775-00	METAL 82K METAL GLAZE 220K	1% 5%	1/4W 1/10W	R3428 R3429		METAL GLAZE 10K METAL GLAZE 47K	5% 5%	1/10W 1/10W
R2447	1-210-103-91	METAL GLAZE 220K	370	1/10 **	R3430	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R2448		METAL GLAZE 100K METAL GLAZE 100	5% 5%	1/10W 1/10W	R3431	1-216-089-91	METAL GLAZE 47K	5%	1/10 <b>W</b>
R2449 R2450	1-216-115-00	METAL GLAZE 100 METAL GLAZE 560K	5%	1/10W	R3432		METAL GLAZE 10K	5%	1/10W
R2451 R2452	1-216-077-00	METAL GLAZE 15K METAL GLAZE 47K	5% 5%	1/10W 1/10W	R3435 R3436		METAL GLAZE 680 METAL GLAZE 680	5% 5%	1/10W 1/10W
K2432	1-210-069-91	WIETAL OLAZE 47K	370		R3437	1-216-045-91	METAL GLAZE 680	5%	1/10W
R2453		METAL GLAZE 10K METAL GLAZE 470K	5% 5%	1/10W 1/10W	R3438	1-216-045-91	METAL GLAZE 680	5%	1/10W
R2455 R2458		CONDUCTOR, CHIP	370		R3439	1-216-045-91	METAL GLAZE 680	5%	1/10W
R2463		METAL GLAZE 33K METAL GLAZE 10K	5% 5%	1/10W 1/10W					
R2465	1-216-075-00	WIETAL GLAZE TOK	370	1/10**			<switch></switch>		
R2466 R2467		METAL GLAZE 10K METAL GLAZE 10K	5% 5%	1/10W 1/10W	S2401	1_570_508_11	SWITCH, DIP		
R2470	1-214-702-00	METAL 75	1%	1/4 <b>W</b>	52-101	1 570 570 11	5 W 11 C11, D11		
R2471 R2472		METAL GLAZE 68K METAL GLAZE 3.9K	5% 5%	1/10W 1/10W	; ; ;				
					******	******	********	*****	*****
R2473 R2474		METAL GLAZE 330 METAL GLAZE 1K	5% 5%	1/10W 1/10W	ļ				
R2475	1-216-091-00	METAL GLAZE 56K	5%	1/10W	: : :				
R2476 R2477	1-214-702-00 1-216-091-00	METAL 75 METAL GLAZE 56K	10% 5%	1/4W 1/10W	į				
		METAL GLAZE 3.9K	5%	1/10W	İ				
R2478 R2479		METAL GLAZE 3.9K METAL GLAZE 120	5%	1/10W	i ! !				

Les composants identifies par une trame et une marque \( \frac{\Lambda}{\text{sont}} \) sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and mark  $\triangle$  are critical for safety. Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
		MISCELLANEOUS ************************************	,			ES AND PACKING MATERIALS	
Ž	\$ 1-426-442-21 \$ 1-426-505-11 \$ 1-451-349-12	RESISTOR ASSY, HIGH-VOLT COIL, DEMAGNETIZATION (1 COIL, DEMAGNETIZATION (2 DEFLECTION YOKE (Y20FZA MAGNET, DISK 10mmø	4inch) (linch)	2	1-690-871-11 \ 1-690-871-11 \ 1-765-719-11	CORD, POWER (10A/125V) (U/C CABLE (MINI DIN) 8P CORD SET, POWER (AUS model CORD SET, POWER (AEP model HOLDER (B), PLUG	)
<i>t</i>	1-532-742-11 1-537-877-21 1-543-653-11	MAGNET, ROTATABLE DISK; FUSE, GLASS TUBE 1.64/125V TERMINAL BOARD ASSY, I/O CORE ASSY, BEAD(DIVISION CLAMP, SLEEVE FERRITE	(Q BOARD)		3-861-699-11 * 4-043-769-01 * 4-043-770-01	INSTRUCTIONS FOR USE MANUAL, INTERFACE CUSHION (UPPER) (ASSY) (20in CUSHION (LOWER) (ASSY) (20in HINGE, COVER	
V901 Z	8-451-472-11 8-736-135-05	FUSE (H.B.C.) 4A/250V DEFLECTION YOKE Y14MGA PICTURE TUBE 20FZ5(DARK) (M49JGI PICTURE TUBE 14MG(DARK)	H11X) (20inch)		4-048-072-01 4-048-073-01 * 4-058-819-01 * 4-058-820-01	COVER, CONTROL PANEL (14in COVER, CONTROL PANEL (20in COVER, DROP PROTECTION INDIVIDUAL CARTON (20inch) INDIVIDUAL CARTON (14inch) CUSHION (UPPER) (ASSY) (14in	nch)
*****	******	**************************************	entre de la companie		* 4-058-822-01 * 4-380-432-21	CUSHION (LOVER) (ASSY) (1411 CUSHION (LOWER) (ASSY) (14: BAG, PROTECTION (20inch) BAG, PROTECTION (14inch)	

## **SERVICE MANUAL**

MODEL	DEST.	CHASSIS NO.	MODEL	DEST.	CHASSIS NO.
OEV143	US/CND	SCC-N59D-A	OEV203	US/CND	SCC-N59C-A
OEV143	AEP	SCC-N33H-A	OEV203	AEP	SCC-N33G-A
OEV143	E	SCC-N89A-A	OEV203	E	SCC-N89B-A



## **DIFFERENCE-1** Revised1

Contents of service manual for OEV143/ 203 (OEM production of OLYMPUS OPTICAL CO.,LTD.) is indicating differences between original model only. PVM-14M2MDU/14M2MDE/14M2MDA/ 20M2MDU/20M2MDE/20M2MDA for

#### Section 3 **Set-Up Adjustments** 3-3. Writing Model Data (Page 3-5)

1. Write model data on respective models in the service mode at the location of No.102 MODEL in accordance with Table 3-3.

Table 3-3

Model	Model data
PVM-20M2MDU	0
PVM-20M2MDE	2
PVM-20M2MDA	3
PVM-14M2MDU	4
PVM-14M2MDE	6
PVM-14M2MDA	7
OEV203 (US/CND)	29
OEV203 (AEP/E)	31
OEV143 (US/CND)	26
OEV143 (AEP/E)	28

2. Write the following data in the service mode at the location of No.103 COLOR TEMP DISP 1. COLOR TEMP DISP 1

<u>65</u>

3. Write the following data in the service mode at the location of No.104 COLOR TEMP DISP 2. **COLOR TEMP DISP 2** 

<u>56</u>

4. Write the following data in the service mode at the location of No.105 COLOR TEMP DISP 3. **COLOR TEMP DISP 3** 

93

Standard inspection state Unless otherwise specified in this manual, make adjustment under the following conditions:

APERTURE	MIN	(Turn FLAT fully counterclockwise.)
BRIGHT		(Center click)
CHROMA	50%	(Center click)
PHASE	50%	(Center click)
CONTRAST	80%	(Center click)
VOLUME	50%	,

TRINITRON® COLOR VIDEO MONITOR

SONY

#### 3-12. Focus Adjustment (Page 3-10)

#### 1. 20 inch Models

OEV203 only
Press MENU and select SUB CONTROL.
Set as follows:
SUB CONTRAST: +40
SUB BRIGHT: +20 (US/Canadian models)
SUB BRIGHT: +10 (AEP/E models)

- 1. Input a 525 monoscope signal.
- 2. Adjust the focus to optimize the focus on the characters "30" at

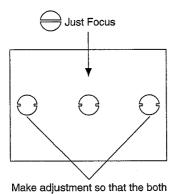
the center of the screen with FOCUS PACK VR.

- 3. Switch to an all-white signal and check the uniformity.
- 4. After focus adjustment, paint-lock the FOCUS PACK VR knob.

#### 2. 14 inch Models

# OEV143 only Press MENU and select SUB CONTROL. Set as follows: SUB CONTRAST : +40 SUB BRIGHT : +20

- 1. Input a 525 dot signal.
- Make adjustment so that the center dot and center of the dots on both sides are not separated with using RV707 on C board.
- 3. Check that the resolution is more than 600 lines by means of a digital monoscope signal.
- 4. Change an all-white signal, and check that the magenta ring is unconspicuous by means.



the dots are not separated

Fig. 3-28

#### Section 5 Circuit Adjustments 9. Adjustment of Sub Cont (Page 5-9)

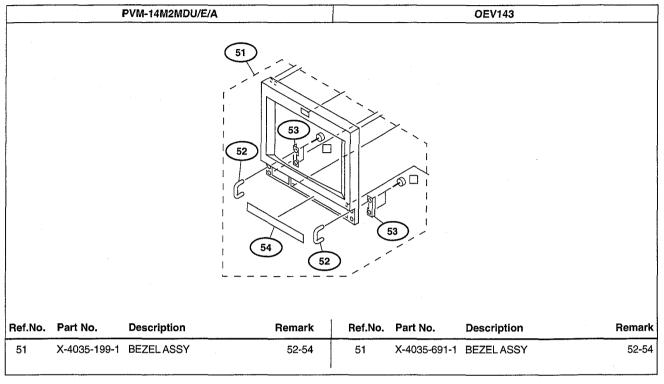
OEV143/203 only
Press MENU and select SUB CONTROL.
Set as follows:
SUB CONTRAST : +40
SUB BRIGHT : +20

- 1) Input the window signal.
- 2) Enter the Normal mode.
- 3) Attach a luminance meter to the window of the CRT surface.
- 4) Make adjustment so that the values will be as shown in Table 5-7 with SUB CON NORM.
- 5) Enter the O/S mode.
- 6) Make adjustment so that the values will be as shown in Table 5-7 with SUB CON <0/S>.

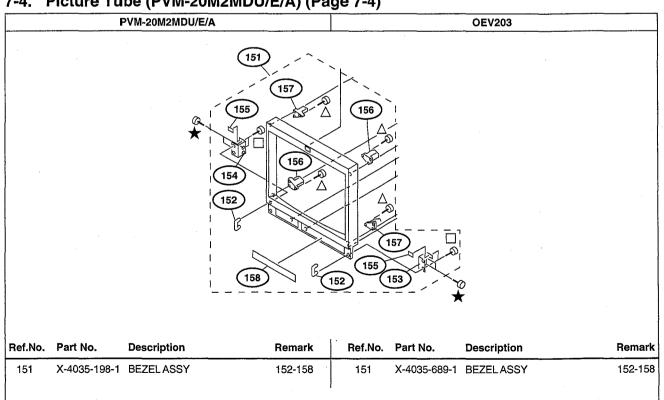
	lable 5	Unit (cd/m²)	
	PVM-14	PVM-20	OEV143/203
SUB CON <norm></norm>	170±20	150±20	210±20
SUB CON <o s=""></o>	170±20	150±20	210±20

#### Section 7 **Exploded Views**

### 7-2. Picture Tube (PVM-14M2MDU/E/A) (Page 7-2)



#### 7-4. Picture Tube (PVM-20M2MDU/E/A) (Page 7-4)



#### **Section 8 Electrical Parts List** Accessories and Packing Materials (Page 8-32)

PVM-14M2MDU/E/A/20M2MDU/E/A			OEV143/203				
Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
	3-861-644-03	INSTRUCTIONS FOR USE (JAPANESE,ENGLISH,FRI GERMAN,ITALIAN,SPANI	ENCH,		3-862-979-21	CORE,FERRITE MANUAL,INSTRUCTION ( (ENGLISH,FREN MANUAL,INSTRUCTION ( SH,FRENCH,GERMAN,ITAL)	ICH,SPANISH AEP)



## **SERVICE MANUAL**

MODEL MODEL DEST. CHASSIS NO. DEST. CHASSIS NO. **OEV-143** OEV-203 US/CND SCC-N59D-A US/CND SCC-N59C-A **OEV-143** OEV-203 AEP SCC-N33H-A AEP SCC-N33G-A

Contents of service manual for OEV-143/203 (OEM production of OLYMPUS OPTICAL CO.,LTD.) is indicating differences between original model only. PVM-14M2MDU/14M2MDE/14M2MDA/ 20M2MDU/20M2MDE/20M2MDA for repair.

**DIFFERENCE-1** 

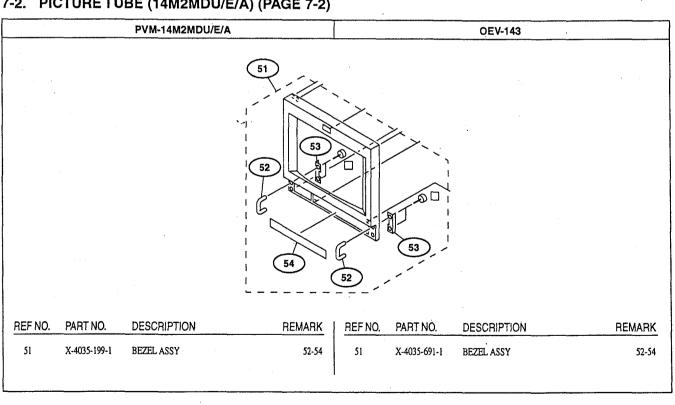
**SECTION 7** 

**EXPLODED VIEWS** 

OS mm

SP0584 # 2039/06

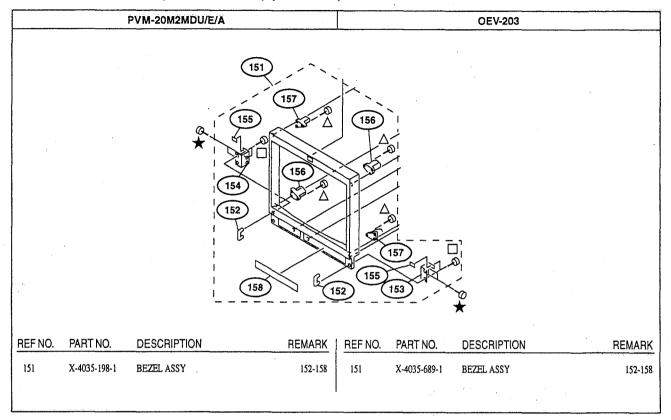
7-2. PICTURE TUBE (14M2MDU/E/A) (PAGE 7-2)



TRINITRON® COLOR VIDEO MONITOR

SONY.

#### 7-4. PICTURE TUBE (20M2MDU/E/A) (PAGE 7-4)



# SECTION 8 ELECTRICAL PARTS LIST ACCESSORIES AND PACKING MATERIALS (PAGE 8-32)

PVM-14M2MDU/E/A/20M2MDU/E/A			OEV-143/203				
REF NO.	PART NO.	DESCRIPTION	REMARK	REF NO.	PART NO.	DESCRIPTION	REMARK
					1-543-947-11	CORE, FERRITE	
3-861-644-03 INSTRUCTIONS FOR USE		3-862-979-11 MANUAL, INSTRUCTION (US/CND)			ND)		
(JAPANESE, ENGLISH, FRENCH, GERMAN, ITALIAN, SPANISH, CHINESE)			(ENGLISH, FRENCH, SPANISH)				
			•		3-862-979-21	MANUAL, INSTRUCTION (AEP)	• •
	:			1		(ENGLISH, FRENCH, GERMA	N, ITALIAN, SPANISH)